

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM S-3
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ACM RESEARCH, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

94-3290283

(I.R.S. Employer Identification Number)

**42307 Osgood Road, Suite I, Fremont, California
(510) 445-3700**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**David H. Wang
Chief Executive Officer and President
ACM Research, Inc.**

**42307 Osgood Road, Suite I, Fremont, California
(510) 445-3700**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

**Mark L. Johnson
Bella Zaslavsky
K&L Gates LLP**

**One Lincoln Street, Boston, Massachusetts 02111
(617) 261-3100**

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement is declared effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective on filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Unit	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Class A common stock, par value \$0.0001 per share	(1)	(1)	(1)	
Preferred stock, par value \$0.0001 per share	(1)	(1)	(1)	
Debt securities	(1)	(1)	(1)	
Warrants	(1)	(1)	(1)	
Units	(1)	(1)	(1)	
Total			\$ 100,000,000.00(2)	\$ 12,120.00(3)

(1) Pursuant to General Instruction II.D of Form S-3 under the Securities Act, this information is not required to be specified. The securities being registered consist of an indeterminate number or amount of each class of identified securities that from time to time may be (a) sold at indeterminate prices, (b) issued upon conversion, exchange, exercise or settlement of other identified securities, which may, but need not, be issued for separate consideration, and (c) pursuant to Rule 416 under the Securities Act, issued in connection with any stock split, stock dividend or similar transaction with respect to, or pursuant to anti-dilution provisions of, other identified securities.

(2) The proposed maximum aggregate offering price has been estimated solely for the purpose of calculating the registration fee.

(3) The registration fee has been calculated in accordance with Rule 457(o) under the Securities Act.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. The securities may not be sold until the registration statement filed with the Securities and Exchange Commission is declared effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, dated December 10, 2018.

PROSPECTUS

\$100,000,000



**Class A Common Stock
Preferred Stock
Debt Securities
Warrants
Units**

We may offer and sell up to \$100,000,000 in the aggregate of the securities identified above from time to time in one or more offerings. This prospectus provides you with a general description of the securities.

Each time we offer and sell securities, we will provide a supplement to this prospectus that contains specific information about the offering and the amounts, prices and terms of the securities. The supplement may also add, update or change information contained in this prospectus with respect to that offering. You should carefully read this prospectus and the applicable prospectus supplement before you invest in any of our securities.

We may offer and sell the securities described in this prospectus and any prospectus supplement to or through one or more underwriters, dealers and agents, or directly to purchasers, or through a combination of these methods. If any underwriters, dealers or agents are involved in the sale of any of the securities, their names and any applicable purchase price, fee, commission or discount arrangement between or among them will be set forth, or will be calculable from the information set forth, in the applicable prospectus supplement. For more information, please see "About This Prospectus" and "Plan of Distribution" in this prospectus. No securities may be sold without delivery of this prospectus and the applicable prospectus supplement describing the method and terms of the offering of the securities.

Our Class A common stock is listed on the Nasdaq Global Market under the symbol "ACMR".

Investing in these securities involves significant risks. See "Risk Factors" included in any accompanying prospectus supplement and in the documents incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to purchase these securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is, 201 .

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, using a “shelf” registration process. By using a shelf registration statement, we may sell securities from time to time in one or more offerings of up to a total of \$100,000,000, as described in this prospectus. Each time that we offer and sell securities, we will provide a prospectus supplement to this prospectus that contains specific information about the securities being offered and sold and the specific terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement or free writing prospectus may also add, update or change information contained in this prospectus with respect to that offering. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement or free writing prospectus, you should rely on the prospectus supplement or free writing prospectus, as applicable. Before purchasing any securities, you should carefully read both this prospectus and the applicable prospectus supplement (and any applicable free writing prospectuses), together with the additional information described under the heading “Where You Can Find More Information.”

We have not authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus, any applicable prospectus supplement or any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We will not make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus and the applicable prospectus supplement to this prospectus is accurate only as of the date on its respective cover, that the information appearing in any applicable free writing prospectus is accurate only as of the date of that free writing prospectus, and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates. This prospectus incorporates by reference, and any prospectus supplement or free writing prospectus may contain and incorporate by reference, market data and industry statistics, estimates and projections that are based on independent industry publications and other publicly available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. In addition, the market and industry data and forecasts that may be included or incorporated by reference in this prospectus, any prospectus supplement or any applicable free writing prospectus may involve estimates, assumptions and other risks and uncertainties and are subject to change based on various factors, including those discussed under the heading “Risk Factors” contained in this prospectus, the applicable prospectus supplement and any applicable free writing prospectus, and under similar headings in other documents that are incorporated by reference into this prospectus. Accordingly, investors should not place undue reliance on this information.

References in this prospectus to “our company,” “our,” “us,” “we” and similar terms refer to ACM Research, Inc. (including its predecessor prior to its redomestication from California to Delaware in November 2016) and not, unless the context otherwise requires, subsidiaries of ACM Research, Inc.

Our logo design is one of our trademarks. This prospectus also includes trademarks, tradenames, and service marks that are the property of other organizations. For convenience, our logo appears in this prospectus without the TM symbol, but those uses are not intended to indicate that we will not assert, to the fullest extent under applicable law, our rights to this trademark.

WHERE YOU CAN FIND MORE INFORMATION

Available Information

We file reports, proxy statements and other information with the SEC. Information filed with the SEC by us can be inspected and copied at the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of this information by mail from the Public Reference Room of the SEC at prescribed rates. Further information on the operation of the SEC's Public Reference Room in Washington, D.C. can be obtained by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website at www.sec.gov that contains reports, proxy and information statements and other information about issuers, such as us, who file electronically with the SEC.

Our website address is www.acmresh.com. The information on our website, however, is not, and should not be deemed to be, a part of this prospectus or any prospectus supplement. We have included our website address as an inactive textual reference only.

This prospectus and any prospectus supplement are part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. The full registration statement may be obtained from the SEC or us, as provided below. Forms of the indenture and other documents establishing the terms of the offered securities are or may be filed as exhibits to the registration statement or documents incorporated by reference in the registration statement. Statements in this prospectus or any prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. You may inspect a copy of the registration statement at the SEC's Public Reference Room in Washington, D.C. or through the SEC's website, as provided above.

Incorporation by Reference

The SEC's rules allow us to "incorporate by reference" information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, and subsequent information that we file with the SEC will automatically update and supersede that information. Any statement contained in this prospectus or a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or a subsequently filed document incorporated by reference modifies or replaces that statement.

We incorporate by reference our documents listed below and any future filings made by us with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, or the Exchange Act, between the date of this prospectus and the termination of the offering of the securities described in this prospectus. We are not, however, incorporating by reference any documents or portions thereof, whether specifically listed below or filed in the future, that are not deemed "filed" with the SEC, including any Compensation Committee report and performance graph or any information furnished pursuant to Item 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K.

This prospectus and any accompanying prospectus supplement incorporate by reference the documents set forth below that have previously been filed with the SEC:

- our Annual Report on Form 10-K for the year ended December 31, 2017, filed with the SEC on March 23, 2018.
- the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2017, from our Definitive Proxy Statement on Schedule 14A, filed with the SEC on May 4, 2018.
- our Quarterly Reports on Form 10-Q, as amended, for the quarters ended March 31, 2018, June 30, 2018 and September 30, 2018, filed with the SEC on May 14, 2018 (as amended on October 15, 2018), August 9, 2018 (as amended on October 15, 2018) and November 14, 2018, respectively. and

- our Current Reports on Form 8-K filed with the SEC on January 16, 2018, January 22, 2018, May 1, 2018, June 20, 2018 and July 3, 2018.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents.

You may request a free copy of any of the documents incorporated by reference in this prospectus by writing or telephoning us at the following address:

ACM Research, Inc.
42307 Osgood Road, Suite 1
Fremont, California
(510) 445-3700
Attention: Investor Relations

Exhibits to the filings will not be sent, unless those exhibits have been specifically incorporated by reference in this prospectus or any accompanying prospectus supplement.

ABOUT OUR COMPANY

We, and our subsidiaries, primarily develop, manufacture and sell single-wafer wet cleaning equipment, which semiconductor manufacturers can use in numerous manufacturing steps to remove particles, contaminants and other random defects, and thereby improve product yield, in fabricating advanced integrated circuits.

We incorporated in California in January 1998 and redomesticated in Delaware in November 2016. Our headquarters are located at 42307 Osgood Road, Suite I, Fremont, California 94539, where our telephone number is (510) 445-3700.

RISK FACTORS

Investment in any securities offered pursuant to this prospectus and the applicable prospectus supplement involves risks. Before acquiring any of such securities, you should carefully consider the risk factors incorporated by reference to our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K filed by us, and all other information contained or incorporated by reference into this prospectus, as updated by our filings under the Exchange Act, and the risk factors and other information contained in the applicable prospectus supplement and any applicable free writing prospectus. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

USE OF PROCEEDS

We intend to use the net proceeds from the sale of securities as set forth in the applicable prospectus supplement.

DESCRIPTION OF CAPITAL STOCK

General

As of December 1, 2018, our authorized capital stock consisted of 50,000,000 shares of Class A common stock, \$0.0001 par value per share, 2,409,738 shares of Class B common stock, \$0.0001 par value per share, and 10,000,000 shares of preferred stock, \$0.0001 par value per share. Class A common stock and Class B common stock are referred to collectively as common stock.

The following summary describes our capital stock, including material provisions of our charter, our bylaws and Delaware law. Because the following is only a summary, it does not contain all of the information that may be important to you. For a complete description, you should refer to our charter and bylaws, copies of which are incorporated by reference as exhibits to the registration statement of which this prospectus is a part.

Common Stock

Outstanding Shares and Options

As of December 1, 2018, there were:

- 14,085,315 shares of Class A common stock outstanding, held of record by 88 stockholders;
- 3,739,503 shares of Class A common stock issuable upon exercise of outstanding stock options; and
- 1,918,423 shares of Class B common stock outstanding, held of record by 35 stockholders.

Authorized but unissued shares of Class B common stock are not available for reissuance. The actual number of stockholders is greater than the number of record holders and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

Voting Rights

Except as otherwise required by Delaware law, at every annual or special meeting of stockholders, holders of Class B common stock are entitled to 20 votes per share and holders of Class A common stock are entitled to one vote per share. The holders of Class A common stock and Class B common stock vote together as a single class, unless otherwise required by law. Delaware law could require either holders of Class A common stock or Class B common stock to vote separately as a single class in the following circumstances:

- if we were to seek to amend our charter to increase the authorized number of shares of a class of stock, or to increase or decrease the per share par value of a class of stock, then that class would be required to vote separately to approve the proposed amendment;
- if we were to seek to amend our charter in a manner that alters or changes the powers, preferences or special rights of a class of stock in a manner that affected its holders adversely, then that class would be required to vote separately to approve the proposed amendment; and
- if we were to seek to declare a dividend or distribution that would be disparate as between the two classes.

Stockholders do not have the ability to cumulate votes for the election of directors. Our charter and bylaws provide for a classified board of directors consisting of three classes of approximately equal size, each serving staggered three-year terms, when the outstanding shares of Class B common stock represent less than a majority of the combined voting power of the common stock. Our directors will be assigned by the then-current board to a class when the outstanding shares of Class B common stock represent less than a majority of the combined voting power of the common stock.

Dividends

Subject to preferences that may be applicable to any then outstanding preferred stock, the holders of our outstanding shares of common stock are entitled to receive dividends, if any, as may be declared from time to time by the board of directors out of legally available funds. The holders of Class A common stock and Class B common stock are entitled to share equally, identically and ratably, on a per share basis, with respect to any dividend or distribution unless different treatment of the shares of each such class is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class A common stock and Class B common stock, each voting separately as a class. At present, we have no plans to issue dividends.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock.

Conversion

Each outstanding share of Class B common stock is convertible into one share of Class A common stock (a) at any time, at the option of the holder, or (b) upon any transfer of such share of Class B common stock, whether or not for value, except for certain transfers described in our charter, including transfers to family members, trusts solely for the benefit of the stockholder or their family members, and partnerships, corporations, and other entities exclusively owned by the stockholder or their family members. In addition, on or after the date of this prospectus, all outstanding shares of Class B common stock will convert automatically into shares of Class A common stock, on a one for one basis, upon (a) the election of the holders of a majority of the then outstanding shares of Class B common stock or (b) on the first December 31 that occurs more than five years after the date of this prospectus if the October Market Cap with respect to the month of October immediately preceding such December 31 exceeds \$1.0 billion, provided that the conversion provided by this clause (b) shall not apply and no automatic conversion of Class B common stock into Class A common stock will ever occur pursuant to this clause (b) if the October Market Cap for the month of October immediately preceding a December 31 exceeds \$1.0 billion prior to the fifth anniversary of the date of this prospectus. For purposes of this paragraph, "October Market Cap" means, with respect to any October throughout which Class A common stock is traded on a registered securities exchange, the product of the average of the daily volume weighted average trading prices of Class A common stock for each of the days in such month of October multiplied by the number of shares of common stock outstanding on the last trading day of such month of October. Once converted or transferred and converted into Class A common stock, shares of Class B common stock will not be reissued.

Other Rights and Preferences

Other than as described above, holders of common stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to common stock. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Preferred Stock

Under the terms of our charter, the board of directors is authorized to issue up to 10,000,000 shares of preferred stock in one or more series, to establish the number of shares to be included in each such series, and to fix the designation, powers, preferences and rights of such shares and any qualifications, limitations or restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and other provisions, any or all of which may be greater than the rights of common stock. The issuance of preferred stock with voting and conversion rights may adversely affect the voting power of the holders of common stock, including the loss of voting control to others, and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action.

Registration Rights

Under our registration rights agreement with certain of our stockholders, based on the number of shares outstanding as of December 1, 2018, stockholders, or their transferees, have the right, under specified circumstances, to require us to register from time to time under the Securities Act of 1933, or the Securities Act, up to 2,950,697 shares of Class A common stock.

The following description of the terms of the registration rights agreement is intended as a summary only and is qualified in its entirety by reference to the registration rights agreement filed with the SEC on and is incorporated by reference as an exhibit to the registration statement of which this prospectus is a part.

- *Demand Registration Rights.* Any time at least 90 days after the date of this prospectus, on no more than four occasions and no more than one occasion in any six-month period, Xinxin (Hongkong) Capital Co., Limited and Victorious Way Limited will have the right to request that we register with the SEC (a) on a registration statement on Form S-1, (i) all or a portion of the shares registrable under the registration rights agreement reasonably anticipated to have an aggregate offering price of at least \$7,500,000 or (ii) all of the registrable shares then held by Xinxin (Hongkong) Capital Co., Limited and Victorious Way Limited or (b) on a registration statement on Form S-3, (i) all or a portion of the shares registrable under the registration rights agreement reasonably anticipated to have an aggregate offering price of at least \$3,750,000 or (ii) all of the registrable shares then held by Xinxin (Hongkong) Capital Co., Limited and Victorious Way Limited. Following such a request, the other holders of registrable shares will have the right to request that we include in such registration statement all or a portion of their registrable shares. Such demand registration rights are held by Xinxin (Hongkong) Capital Co., Limited and Victorious Way Limited and granting demand registration rights to any other holders will require the consent of Xinxin (Hongkong) Capital Co., Limited and Victorious Way Limited.
- *Incidental Registration Rights.* If we propose to register shares of Class A common stock under the Securities Act on a form that may be used for the registration of eligible shares, the holders may request that we register all or a portion of the eligible shares they held by them.

In the event that any registration in which the holders of eligible shares participate pursuant to the registration rights agreement is an underwritten public offering, the number of eligible shares to be included may, in specified circumstances, be limited due to market conditions. If the underwriter determines that less than all of the eligible shares proposed to be sold can be included in such offering, then eligible shares held by executive officers shall only be included in such offering if all the holders that are not executive officers are able to register all of the eligible shares proposed to be sold in such registration.

Under the registration rights agreement, we generally are required to pay all registration expenses other than underwriting discounts and selling commissions and we are required to indemnify each participating holder with respect to each registration of eligible shares that is completed.

For further information on our registration rights agreement, you should refer to second amended and restated registration rights agreement, a copy of which is incorporated by reference as an exhibit to the registration statement of which this prospectus is a part.

Anti-Takeover Provision

So long as the outstanding shares of Class B common stock represent a majority of the combined voting power of common stock, the holders of Class B common stock will effectively control all matters submitted to our stockholders for a vote, as well as the overall management and direction of our company, which will have the effect of delaying, deferring or discouraging another person from acquiring control of our company.

After such time as the shares of Class B common stock no longer represent a majority of the combined voting power of common stock, the provisions of Delaware law, and our charter and our bylaws may have the effect of delaying, deferring or discouraging another person from acquiring control of our company.

Delaware Law

Section 203 of the Delaware General Corporation Law prevents some Delaware corporations from engaging, under some circumstances, in a business combination, which includes a merger or sale of at least 10% of the corporation's assets with any interested stockholder, meaning a stockholder who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of the corporation's outstanding voting stock, unless:

- the transaction is approved by the board of directors prior to the time that the interested stockholder became an interested stockholder;
- upon consummation of the transaction, which resulted in the stockholder's becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding stock owned by directors who are also officers of the corporation; or
- subsequent to such time that the stockholder became an interested stockholder the business combination is approved by the board and authorized at an annual or special meeting of stockholders by at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

A Delaware corporation may "opt out" of these provisions with an express provision in its original charter or an express provision in its charter or bylaws resulting from a stockholders' amendment approved by at least a majority of the outstanding voting shares. We have not opted out of these provisions. As a result, mergers or other takeover or change in control attempts of us may be discouraged or prevented.

Charter and Bylaw Provisions

Our charter and bylaws include a number of provisions that may have the effect of deterring hostile takeovers or delaying or preventing changes in control of our company, even after such time as the shares of Class B common stock no longer represent a majority of the combined voting power of common stock, including the following:

- *Separate Class B Vote for Certain Transactions*. Until the first date on which the outstanding shares of Class B common stock represent less than 35% of the combined voting power of common stock, any transaction that would result in a change in control of our company will require the approval of a majority of our outstanding Class B common stock voting as a separate class. This provision could delay or prevent the approval of a change in control that might otherwise be approved by a majority of outstanding shares of Class A and Class B common stock, voting together on a combined basis.
- *Dual Class Stock*. As described above in "—Common Stock—Voting Rights," our charter provides for a dual class common stock structure, which provides certain members of our senior management with the ability to control the outcome of matters requiring stockholder approval, even if they collectively own significantly less than a majority of the shares of our outstanding Class A and Class B common stock, including the election of directors and significant corporate transactions, such as a merger or other sale of our company or its assets.
- *Supermajority Approvals*. Our charter and bylaws provide that when the outstanding shares of Class B common stock represent less than a majority of the combined voting power of common stock, certain amendments to our charter or bylaws will require the approval of two-thirds of the combined vote of our then-outstanding shares of Class A and Class B common stock. This will have the effect of making it more difficult to amend our charter or bylaws to remove or modify certain provisions.
- *Board of Directors Vacancies*. Our charter and bylaws provide that stockholders may fill vacant directorships. When the outstanding shares of Class B common stock represent less than a majority of the combined voting power of common stock, our charter and bylaws authorize only the board of directors to fill vacant directorships. In addition, the number of directors constituting the board is set only by resolution adopted by a majority vote of our entire board. These provisions restricting the filling of vacancies will prevent a stockholder from increasing the size of the board and gaining control of the board by filling the resulting vacancies with its own nominees. Our charter provides that directors may be removed with or without cause only by the affirmative vote of the holders of at least two-thirds of the votes that all of the stockholders would be entitled to cast in any annual election of directors.

- *Classified Board.* The board of directors is not currently classified. Our charter and bylaws provide that when outstanding shares of Class B common stock represent less than a majority of the combined voting power of common stock, the board will be classified into three classes of directors, each of which will hold office for a three-year term. In addition, thereafter, directors may be removed from the board with or without cause only by the affirmative vote of the holders of at least two-thirds of the voting power of the then-outstanding shares of Class A and Class B common stock. The existence of a classified board could delay a successful tender offeror from obtaining majority control of the board, and the prospect of that delay might deter a potential offeror.
- *Stockholder Action; Special Meeting of Stockholders.* Our charter provides that stockholders will be able to take action by written consent. When the outstanding shares of Class B common stock represent less than a majority of the combined voting power of common stock, our stockholders will no longer be able to take action by written consent, and will only be able to take action at annual or special meetings of our stockholders. Stockholders will not be permitted to cumulate their votes for the election of directors. The absence of cumulative voting may make it more difficult for stockholders who own less than a majority in voting power to elect any directors to the board of directors. Our bylaws further provide that special meetings of our stockholders may be called only by the board, the chair of the board or our chief executive officer. A stockholder may not call a special meeting, which may delay the ability of our stockholders to force consideration of a proposal or for holders controlling a majority in voting power of our capital stock to take any action, including the removal of director.
- *Advance Notice Requirements for Stockholder Proposals and Director Nominations.* Our bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors at any meeting of stockholders. Our bylaws also specify certain requirements regarding the form and content of a stockholder's notice. These provisions may preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our meetings of stockholders.
- *Issuance of Undesignated Preferred Stock.* The board of directors has the authority, without further action by the stockholders, to issue shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by the board. The existence of authorized but unissued shares of preferred stock enables the board to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise.

Choice of Forum

Our charter provides that the Court of Chancery of the State of Delaware will be the exclusive forum for: any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, or our charter or bylaws; any action to interpret, apply, enforce, or determine the validity of our charter or bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

Nasdaq Global Market

The Class A common stock is listed on the Nasdaq Global Market under the symbol "ACMR."

DESCRIPTION OF DEBT SECURITIES

We may offer debt securities that are senior or subordinated. We refer to senior debt securities and subordinated debt securities collectively as debt securities. The following description summarizes the general terms and provisions of the debt securities. We will describe the specific terms of the debt securities and the extent, if any, to which the general provisions summarized below apply to any series of debt securities in the prospectus supplement relating to the series and any applicable free writing prospectus that we authorize to be delivered.

We may issue senior debt securities from time to time, in one or more series, under a senior indenture to be entered into between us and a senior trustee to be named in a prospectus supplement, which we refer to as the senior trustee. We may issue subordinated debt securities from time to time, in one or more series, under a subordinated indenture to be entered into between us and a subordinated trustee to be named in a prospectus supplement, which we refer to as the subordinated trustee. The forms of senior indenture and subordinated indenture will be either filed as exhibits to the registration statement of which this prospectus forms a part or filed as exhibits to a Current Report on Form 8-K and incorporated by reference in such registration statement. The senior indenture and the subordinated indenture are referred to individually as an indenture and together as the indentures, and the senior trustee and the subordinated trustee are referred to individually as a trustee and together as the trustees. This section summarizes some of the provisions of the indentures and is qualified in its entirety by the specific text of the indentures, including definitions of terms used in the indentures. Wherever we refer to particular sections of, or defined terms in, the indentures, those sections or defined terms are incorporated by reference in this prospectus or the applicable prospectus supplement. You should review the indentures that are filed as exhibits to the registration statement of which this prospectus forms a part for additional information.

Neither indenture will limit the amount of debt securities that we may issue. The applicable indenture will provide that debt securities may be issued up to an aggregate principal amount authorized from time to time by us and may be payable in any currency or currency unit designated by us or in amounts determined by reference to an index.

General

The senior debt securities will constitute our unsecured and unsubordinated general obligations and will rank equally in right of payment with our other unsecured and unsubordinated obligations. The subordinated debt securities will constitute our unsecured and subordinated general obligations and will be junior in right of payment to our senior indebtedness (including senior debt securities), as described under the heading “—Certain Terms of Subordinated Debt Securities—Subordination.” The debt securities will be structurally subordinated to all existing and future indebtedness and other liabilities of our subsidiaries unless such subsidiaries expressly guarantee such debt securities. Because the debt securities will be our unsecured obligations, any secured debt or other secured obligations will be effectively senior to the debt securities to the extent of the value of the assets securing such debt or other obligations.

The applicable prospectus supplement and/or free writing prospectus will include any additional or different terms of the debt securities of any series being offered, including the following terms:

- the title and type of the debt securities.
- whether the debt securities will be senior or subordinated debt securities, and, with respect to any subordinated debt securities the terms on which they are subordinated.
- the initial aggregate principal amount of the debt securities.
- the price or prices at which we will sell the debt securities.
- the maturity date or dates of the debt securities and the right, if any, to extend such date or dates.
- the rate or rates, if any, at which the debt securities will bear interest, or the method of determining such rate or rates.
- the date or dates from which such interest will accrue, the interest payment dates on which such interest will be payable or the method of determination of such dates.

- the right, if any, to extend the interest payment periods and the duration of that extension.
- the manner of paying principal and interest and the place or places where principal and interest will be payable.
- provisions for a sinking fund, purchase fund or other analogous fund, if any.
- any redemption dates, prices, obligations and restrictions on the debt securities.
- the currency, currencies or currency units in which the debt securities will be denominated and the currency, currencies or currency units in which principal and interest, if any, on the debt securities may be payable.
- any conversion or exchange features of the debt securities.
- whether the debt securities will be subject to the defeasance provisions in the indenture.
- whether the debt securities will be issued in definitive or global form or in definitive form only upon satisfaction of certain conditions.
- whether the debt securities will be guaranteed as to payment or performance.
- any special tax implications of the debt securities.
- any events of default or covenants in addition to or in lieu of those set forth in the indenture. and
- any other material terms of the debt securities.

When we refer to “principal” in this section with reference to debt securities, we are also referring to premium, if any.

We may from time to time, without notice to or the consent of the holders of any series of debt securities, create and issue further debt securities of any such series ranking equally with the debt securities of such series in all respects (or in all respects other than (1) the payment of interest accruing prior to the issue date of such further debt securities or (2) the first payment of interest following the issue date of such further debt securities). Such further debt securities may be consolidated and form a single series with the debt securities of such series and have the same terms as to status, redemption or otherwise as the debt securities of such series.

Holders may present debt securities for exchange and may present debt securities for transfer in the manner, at the places and subject to the restrictions set forth in the debt securities and the applicable prospectus supplement. We will provide those services without charge, although a holder may have to pay any tax or other governmental charge payable in connection with any exchange or transfer, as set forth in the indenture.

Debt securities may bear interest at a fixed rate or a floating rate. Debt securities bearing no interest or interest at a rate that at the time of issuance is below the prevailing market rate (original issue discount securities) may be sold at a discount below their stated principal amount. U.S. federal income tax considerations applicable to any such discounted debt securities or to certain debt securities issued at par that are treated as having been issued at a discount for U.S. federal income tax purposes will be described in the applicable prospectus supplement.

We may issue debt securities with the principal amount payable on any principal payment date, or the amount of interest payable on any interest payment date, to be determined by reference to one or more currency exchange rates, securities or baskets of securities, commodity prices or indices. You may receive a payment of principal on any principal payment date, or a payment of interest on any interest payment date, that is greater than or less than the amount of principal or interest otherwise payable on such dates, depending on the value on such dates of the applicable currency, security or basket of securities, commodity or index. Information as to the methods for determining the amount of principal or interest payable on any date, the currencies, securities or baskets of securities, commodities or indices to which the amount payable on such date is linked and certain related tax considerations will be set forth in the applicable prospectus supplement.

Certain Terms of Senior Debt Securities

Covenants

Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the senior debt securities will not contain any financial or restrictive covenants, including covenants restricting either us or any of our subsidiaries from incurring, issuing, assuming or guaranteeing any indebtedness secured by a lien on any of our or our subsidiaries' property or capital stock, or restricting either us or any of our subsidiaries from entering into sale and leaseback transactions.

Consolidation, Merger and Sale of Assets

Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, we may not consolidate with or merge into any other person, in a transaction in which we are not the surviving corporation, or convey, transfer or lease our properties and assets substantially as an entirety to any person, in either case, unless:

- the successor entity, if any, is a U.S. corporation, limited liability company, partnership or trust.
- the successor entity assumes our obligations on the senior debt securities and under the senior indenture.
- immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing, and
- we have delivered to the senior trustee an officer's certificate and an opinion of counsel, each stating that the consolidation, merger, conveyance, transfer or lease and, if a supplemental indenture is required in connection with such transaction, such supplemental indenture, comply with the senior indenture and all conditions precedent provided for in the senior indenture relating to such transaction have been complied with.

The restrictions described in the bullets above do not apply (1) to our consolidation with or merging into one of our affiliates, if our board of directors determines in good faith that the purpose of the consolidation or merger is principally to change our state of incorporation or our form of organization to another form or (2) if we merge with or into a single direct or indirect wholly-owned subsidiary of ours.

The surviving business entity will succeed to, and be substituted for, us under the senior indenture and the senior debt securities and, except in the case of a lease, we shall be released from all obligations under the senior indenture and the senior debt securities.

No Protection in the Event of a Change in Control

Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the senior debt securities will not contain any provisions that may afford holders of the senior debt securities protection in the event we have a change in control or in the event of a highly leveraged transaction (whether or not such transaction results in a change in control).

Events of Default

Unless we indicate otherwise in a prospectus supplement with respect to a particular series of senior debt securities, the following are events of default under the senior indenture with respect to senior debt securities of each series:

- failure to pay interest on any senior debt securities of such series when due and payable, if that default continues for a period of 30 days (or such other period as may be specified for such series).
- failure to pay principal on the senior debt securities of such series when due and payable whether at maturity, upon redemption, by declaration or otherwise (and, if specified for such series, the continuance of such failure for a specified period).

- default in the performance of or breach of any of our covenants or agreements in the senior indenture applicable to senior debt securities of such series, other than a covenant breach that is specifically dealt with elsewhere in the senior indenture, and that default or breach continues for a period of 90 days after we receive written notice from the trustee or from the holders of 25% or more in aggregate principal amount of the senior debt securities of such series.
- certain events of bankruptcy or insolvency, whether or not voluntary. and
- any other event of default provided for in such series of senior debt securities as may be specified in the applicable prospectus supplement.

The default by us under any other debt, including any other series of debt securities, is not a default under the senior indenture.

If an event of default other than an event of default specified in the fourth bullet point above occurs with respect to a series of senior debt securities and is continuing under the senior indenture, then, and in each such case, either the trustee or the holders of not less than 25% in aggregate principal amount of such series then outstanding under the senior indenture (each such series voting as a separate class) by written notice to us and to the trustee, if such notice is given by the holders, may, and the trustee at the request of such holders shall, declare the principal amount of and accrued interest on such series of senior debt securities to be immediately due and payable, and upon this declaration, the same shall become immediately due and payable.

If an event of default specified in the fourth bullet point above occurs and is continuing, the entire principal amount of and accrued interest on each series of senior debt securities then outstanding shall automatically become immediately due and payable.

Unless otherwise specified in the prospectus supplement relating to a series of senior debt securities originally issued at a discount, the amount due upon acceleration shall include only the original issue price of the senior debt securities, the amount of original issue discount accrued to the date of acceleration and accrued interest, if any.

Upon certain conditions, declarations of acceleration may be rescinded and annulled and past defaults may be waived by the holders of a majority in aggregate principal amount of all the senior debt securities of such series affected by the default, each series voting as a separate class. Furthermore, subject to various provisions in the senior indenture, the holders of a majority in aggregate principal amount of a series of senior debt securities, by notice to the trustee, may waive a continuing default or event of default with respect to such senior debt securities and its consequences, except a default in the payment of principal of or interest on such senior debt securities (other than any such default in payment resulting solely from an acceleration of the senior debt securities) or in respect of a covenant or provision of the senior indenture that cannot be modified or amended without the consent of the holders of each such senior debt security. Upon any such waiver, such default shall cease to exist, and any event of default with respect to such senior debt securities shall be deemed to have been cured, for every purpose of the senior indenture. but no such waiver shall extend to any subsequent or other default or event of default or impair any right consequent thereto.

The holders of a majority in aggregate principal amount of a series of senior debt securities may direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to such senior debt securities. However, the trustee may refuse to follow any direction that conflicts with law or the senior indenture, that may involve the trustee in personal liability or that the trustee determines in good faith may be unduly prejudicial to the rights of holders of such series of senior debt securities not joining in the giving of such direction and may take any other action it deems proper that is not inconsistent with any such direction received from holders of such series of senior debt securities. A holder may not pursue any remedy with respect to the senior indenture or any series of senior debt securities unless:

- the holder gives the trustee written notice of a continuing event of default.
- the holders of at least 25% in aggregate principal amount of such series of senior debt securities make a written request to the trustee to pursue the remedy in respect of such event of default.

- the requesting holder or holders offer the trustee indemnity satisfactory to the trustee against any costs, liability or expense.
- the trustee does not comply with the request within 60 days after receipt of the request and the offer of indemnity. and
- during such 60-day period, the holders of a majority in aggregate principal amount of such series of senior debt securities do not give the trustee a direction that is inconsistent with the request.

These limitations, however, do not apply to the right of any holder of a senior debt security of any affected series to receive payment of the principal of and interest on such senior debt security in accordance with the terms of such debt security, or to bring suit for the enforcement of any such payment in accordance with the terms of such debt security, on or after the due date for the senior debt securities, which right shall not be impaired or affected without the consent of the holder.

The senior indenture requires certain of our officers to certify, on or before a fixed date in each year in which any senior debt security is outstanding, as to their knowledge of our compliance with all covenants, agreements and conditions under the senior indenture.

Satisfaction and Discharge

We can satisfy and discharge our obligations to holders of any series of debt securities if:

- we have paid or caused to be paid the principal of and interest on all senior debt securities of such series (with certain limited exceptions) when due and payable. or
- we deliver to the senior trustee for cancellation all senior debt securities of such series theretofore authenticated under the senior indenture (with certain limited exceptions). or
- all senior debt securities of such series have become due and payable or will become due and payable within one year (or are to be called for redemption within one year under arrangements satisfactory to the senior trustee) and we deposit in trust an amount of cash or a combination of cash and U.S. government or U.S. government agency obligations (or in the case of senior debt securities denominated in a foreign currency, foreign government securities or foreign government agency securities) sufficient to make interest, principal and any other payments on the debt securities of that series on their various due dates. or
- and if, in any such case, we also pay or cause to be paid all other sums payable under the senior indenture, as and when the same shall be due and payable, and we deliver to the senior trustee an officer's certificate and an opinion of counsel, each stating that these conditions have been satisfied.

Under current U.S. federal income tax law, the deposit and our legal release from the debt securities would be treated as though we took back your debt securities and gave you your share of the cash and debt securities or bonds deposited in trust. In that event, you could recognize gain or loss on the debt securities you give back to us. Purchasers of the debt securities should consult their own advisers with respect to the tax consequences to them of such deposit and discharge, including the applicability and effect of tax laws other than the U.S. federal income tax law.

Defeasance

Unless the applicable prospectus supplement provides otherwise, the following discussion of legal defeasance and covenant defeasance will apply to any series of debt securities issued under the indentures.

Legal Defeasance. We can legally release ourselves from any payment or other obligations on the debt securities of any series, a procedure known as legal defeasance, if certain conditions are met, including the following:

- We deposit in trust for your benefit and the benefit of all other direct holders of the debt securities of the same series cash or a combination of cash and U.S. government or U.S. government agency obligations (or, in the case of senior debt securities denominated in a foreign currency, foreign government or foreign government agency obligations) that will generate enough cash to make interest, principal and any other payments on the debt securities of that series on their various due dates.

- There is a change in current U.S. federal income tax law or an IRS ruling that lets us make the above deposit without causing you to be taxed on the debt securities any differently than if we did not make the deposit and instead repaid the debt securities ourselves when due. Under current U.S. federal income tax law, the deposit and our legal release from the debt securities would be treated as though we took back your debt securities and gave you your share of the cash and debt securities or bonds deposited in trust. In that event, you could recognize gain or loss on the debt securities you give back to us.
- We deliver to the trustee a legal opinion of our counsel confirming the tax law change or ruling described above.

If we accomplish legal defeasance, as described above, you would have to rely solely on the trust deposit for repayment of the debt securities. You could not look to us for repayment in the event of any shortfall.

Covenant Defeasance. Without any change in current U.S. federal tax law, we can make the same type of deposit described above and be released from some of the covenants in the debt securities, a procedure known as covenant defeasance. In that event, you would lose the protection of those covenants but would gain the protection of having money and securities set aside in trust to repay the debt securities. In order to achieve covenant defeasance, we must do the following (among other things):

- We must deposit in trust for your benefit and the benefit of all other direct holders of the debt securities of the same series cash or a combination of cash and U.S. government or U.S. government agency obligations (or, in the case of senior debt securities denominated in a foreign currency, foreign government or foreign government agency obligations) that will generate enough cash to make interest, principal and any other payments on the debt securities of that series on their various due dates.
- We must deliver to the trustee a legal opinion of our counsel confirming that under current U.S. federal income tax law we may make the above deposit without causing you to be taxed on the debt securities any differently than if we did not make the deposit and instead repaid the debt securities ourselves when due.

If we accomplish covenant defeasance, you could still look to us for repayment of the debt securities if there were a shortfall in the trust deposit. In fact, if one of the events of default occurred (such as our bankruptcy) and the debt securities become immediately due and payable, there may be such a shortfall. Depending on the events causing the default, you may not be able to obtain payment of the shortfall.

Modification and Waiver

We and the trustee may amend or supplement the senior indenture or the senior debt securities of any series without the consent of any holder to:

- convey, transfer, assign, mortgage or pledge any assets as security for the senior debt securities of one or more series.
- evidence the succession of a corporation, limited liability company, partnership or trust to us, and the assumption by such successor of our covenants, agreements and obligations under the senior indenture or to otherwise comply with the covenant relating to mergers, consolidations and sales of assets.
- comply with requirements of the SEC in order to effect or maintain the qualification of the senior indenture under the Trust Indenture Act of 1939.
- add to our covenants such new covenants, restrictions, conditions or provisions for the protection of the holders, and to make the occurrence, or the occurrence and continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default.
- cure any ambiguity, defect or inconsistency in the senior indenture or in any supplemental indenture or to conform the senior indenture or the senior debt securities to the description of senior debt securities of such series set forth in this prospectus or any applicable prospectus supplement.
- provide for or add guarantors with respect to the senior debt securities of any series.
- establish the forms or terms of the senior debt securities as permitted by the senior indenture.

- evidence and provide for the acceptance of appointment under the senior indenture by a successor trustee, or to make such changes as shall be necessary to provide for or facilitate the administration of the trusts in the senior indenture by more than one trustee.
- add to, change or eliminate any of the provisions of the senior indenture in respect of one or more series of senior debt securities, *provided* that any such addition, change or elimination shall (a) neither (1) apply to any senior debt security of any series created prior to the execution of such supplemental indenture and entitled to the benefit of such provision nor (2) modify the rights of the holder of any such senior debt security with respect to such provision or (b) become effective only when there is no senior debt security described in the preceding clause (a)(1) outstanding.
- make any change to the senior debt securities of any series so long as no senior debt securities of such series are outstanding, or
- make any change that does not adversely affect the rights of any holder in any material respect.

Other amendments and modifications of the senior indenture or the senior debt securities issued may be made, and our compliance with any provision of the senior indenture with respect to any series of senior debt securities may be waived, with the consent of the holders of a majority of the aggregate principal amount of the outstanding senior debt securities of each series affected by the amendment or modification (voting as separate series), provided, however, that each affected holder must consent to any modification, amendment or waiver that:

- extends the final maturity of any senior debt securities of such series.
- reduces the principal amount of any senior debt securities of such series.
- reduces the rate, or extends the time for payment of, interest on any senior debt securities of such series.
- reduces the amount payable upon the redemption of any senior debt securities of such series.
- changes the currency of payment of principal of or interest on any senior debt securities of such series.
- reduces the principal amount of original issue discount securities payable upon acceleration of maturity or the amount provable in bankruptcy.
- waives a continuing default in the payment of principal of or interest on the senior debt securities (other than any such default in payment resulting solely from an acceleration of the senior debt securities).
- changes the provisions relating to the waiver of past defaults or impairs the right of holders to receive payment or to institute suit for the enforcement of any payment or conversion of any senior debt securities of such series on or after the due date therefor.
- modifies any of the provisions of these restrictions on amendments and modifications, except to increase any required percentage or to provide that certain other provisions cannot be modified or waived without the consent of the holder of each senior debt security of such series affected by the modification.
- adversely affects the right to convert or exchange senior debt securities into Class A common stock or other property in accordance with the terms of the senior debt securities. or
- reduces the above-stated percentage of outstanding senior debt securities of such series whose holders must consent to a supplemental indenture or modifies or amends or waives certain provisions of or defaults under the senior indenture.

It shall not be necessary for the holders to approve the particular form of any proposed amendment, supplement or waiver, but it shall be sufficient if the holders' consent approves the substance thereof. After an amendment, supplement or waiver of the senior indenture in accordance with the provisions described in this section becomes effective, the trustee must give to the holders affected thereby certain notice briefly describing the amendment, supplement or waiver. Any failure by the trustee to give such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such amendment, supplemental indenture or waiver.

No Personal Liability of Stockholders, Officers, Directors

The senior indenture provides that no recourse shall be had under any obligation, covenant or agreement of ours in the senior indenture or any supplemental indenture, or in any of the senior debt securities or because of the creation of any indebtedness represented thereby, against any of our stockholders, officers or directors, past, present or future, or of any predecessor or successor entity thereof under any law, statute or constitutional provision or by the enforcement of any assessment or by any legal or equitable proceeding or otherwise. Each holder, by accepting the senior debt securities, waives and releases all such liability.

Concerning the Trustee

The senior indenture provides that, except during the continuance of an event of default, the trustee will not be liable except for the performance of such duties as are specifically set forth in the senior indenture. If an event of default has occurred and is continuing, the trustee will exercise such rights and powers vested in it under the senior indenture and will use the same degree of care and skill in its exercise as a prudent person would exercise under the circumstances in the conduct of such person's own affairs.

The senior indenture and the provisions of the Trust Indenture Act of 1939 incorporated by reference therein contain limitations on the rights of the trustee thereunder, should it become a creditor of ours or any of our subsidiaries, to obtain payment of claims in certain cases or to realize on certain property received by it in respect of any such claims, as security or otherwise. The trustee is permitted to engage in other transactions, provided that if it acquires any conflicting interest (as defined in the Trust Indenture Act of 1939), it must eliminate such conflict or resign.

We may have normal banking relationships with the senior trustee in the ordinary course of business.

Unclaimed Funds

All funds deposited with the trustee or any paying agent for the payment of principal, premium, interest or additional amounts in respect of the senior debt securities that remain unclaimed for two years after the date upon which such amounts became due and payable will be repaid to us. Thereafter, any right of any holder of senior debt securities to such funds shall be enforceable only against us, and the trustee and paying agents will have no liability therefor.

Governing Law

The senior indenture and the senior debt securities will be governed by, and construed in accordance with, the internal laws of the State of New York.

Certain Terms of Subordinated Debt Securities

Similarity to Certain Terms of Senior Debt Securities

Other than the terms of the subordinated indenture and subordinated debt securities relating to subordination or otherwise as described in the prospectus supplement relating to a particular series of subordinated debt securities, the terms of the subordinated indenture and subordinated debt securities are identical in all material respects to the terms of the senior indenture and senior debt securities. Additional or different subordination terms may be specified in the prospectus supplement applicable to a particular series.

Subordination

The indebtedness evidenced by the subordinated debt securities is subordinate to the prior payment in full of all of our senior indebtedness, as defined in the subordinated indenture. During the continuance beyond any applicable grace period of any default in the payment of principal, premium, interest or any other payment due on any of our senior indebtedness, we may not make any payment of principal of or interest on the subordinated debt securities (except for certain sinking fund payments). In addition, upon any payment or distribution of our assets upon any dissolution, winding-up, liquidation or reorganization, the payment of the principal of and interest on the subordinated debt securities will be subordinated to the extent provided in the subordinated indenture in right of payment to the prior payment in full of all our senior indebtedness. Because of this subordination, if we dissolve or otherwise liquidate, holders of our subordinated debt securities may receive less, ratably, than holders of our senior indebtedness. The subordination provisions do not prevent the occurrence of an event of default under the subordinated indenture.

The term "senior indebtedness" of a person means with respect to such person the principal of, premium, if any, interest on, and any other payment due pursuant to any of the following, whether outstanding on the date of the subordinated indenture or incurred by that person in the future:

- all of the indebtedness of that person for money borrowed.
- all of the indebtedness of that person evidenced by notes, debentures, bonds or other securities sold by that person for money.
- all of the lease obligations that are capitalized on the books of that person in accordance with generally accepted accounting principles.
- all indebtedness of others of the kinds described in the first two bullet points above and all lease obligations of others of the kind described in the third bullet point above that the person, in any manner, assumes or guarantees or that the person in effect guarantees through an agreement to purchase, whether that agreement is contingent or otherwise. and
- all renewals, extensions or refunding of indebtedness of the kinds described in the first, second or fourth bullet point above and all renewals or extensions of leases of the kinds described in the third or fourth bullet point above.

unless, in the case of any particular indebtedness, renewal, extension or refunding, the instrument creating or evidencing it or the assumption or guarantee relating to it expressly provides that such indebtedness, renewal, extension or refunding is not superior in right of payment to the subordinated debt securities. Our senior debt securities constitute senior indebtedness for purposes of the subordinated indenture.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of shares of Class A common stock, shares of preferred stock or debt securities. We may issue warrants independently or together with other securities, and the warrants may be attached to or separate from any offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and the investors or a warrant agent. The following summary of material provisions of the warrants and warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to a particular series of warrants. The terms of any warrants offered under a prospectus supplement may differ from the terms described below. We urge you to read the applicable prospectus supplement and any related free writing prospectus, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants.

The particular terms of any issue of warrants will be described in the prospectus supplement relating to the issue. Those terms may include:

- the number of shares of Class A common stock or preferred stock purchasable upon the exercise of warrants to purchase such shares and the price at which such number of shares may be purchased upon such exercise.
- the designation, stated value and terms (including liquidation, dividend, conversion and voting rights) of the series of preferred stock purchasable upon exercise of warrants to purchase preferred stock.
- the principal amount of debt securities that may be purchased upon exercise of a debt warrant and the exercise price for the warrants, which may be payable in cash, securities or other property.
- the date, if any, on and after which the warrants and the related debt securities, preferred stock or Class A common stock will be separately transferable.
- the terms of any rights to redeem or call the warrants.
- the date on which the right to exercise the warrants will commence and the date on which the right will expire.
- U.S. federal income tax consequences applicable to the warrants. and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange, exercise and settlement of the warrants.

Holders of equity warrants will not be entitled to:

- vote, consent or receive dividends.
- receive notice as stockholders with respect to any meeting of stockholders for the election of our directors or any other matter. or
- exercise any rights as stockholders of Sienna.

Each warrant will entitle its holder to purchase the principal amount of debt securities or the number of shares of preferred stock or Class A common stock at the exercise price set forth in, or calculable as set forth in, the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

A holder of warrant certificates may exchange them for new warrant certificates of different denominations, present them for registration of transfer and exercise them at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement. Until any warrants to purchase debt securities are exercised, the holder of the warrants will not have any rights of holders of the debt securities that can be purchased upon exercise, including any rights to receive payments of principal, premium or interest on the underlying debt securities or to enforce covenants in the applicable indenture. Until any warrants to purchase Class A common stock or preferred stock are exercised, the holders of the warrants will not have any rights of holders of the underlying Class A common stock or preferred stock, including any rights to receive dividends or payments upon any liquidation, dissolution or winding up of the Class A common stock or preferred stock, if any.

DESCRIPTION OF UNITS

We may issue units consisting of any combination of the other types of securities offered under this prospectus in one or more series. We may evidence each series of units by unit certificates that we will issue under a separate agreement. We may enter into unit agreements with a unit agent. Each unit agent will be a bank or trust company that we select. We will indicate the name and address of the unit agent in the applicable prospectus supplement relating to a particular series of units.

The following description, together with the additional information included in any applicable prospectus supplement, summarizes the general features of the units that we may offer under this prospectus. You should read any prospectus supplement and any free writing prospectus that we may authorize to be provided to you related to the series of units being offered, as well as the complete unit agreements that contain the terms of the units. Specific unit agreements will contain additional important terms and provisions and we will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from another report that we file with the SEC, the form of each unit agreement relating to units offered under this prospectus.

If we offer any units, certain terms of that series of units will be described in the applicable prospectus supplement, including the following, as applicable:

- the title of the series of units.
- identification and description of the separate constituent securities comprising the units.
- the price or prices at which the units will be issued.
- the date, if any, on and after which the constituent securities comprising the units will be separately transferable.
- a discussion of certain U.S. federal income tax considerations applicable to the units. and
- any other terms of the units and their constituent securities.

GLOBAL SECURITIES

Book-Entry, Delivery and Form

Unless we indicate differently in any applicable prospectus supplement or free writing prospectus, the securities initially will be issued in book-entry form and represented by one or more global notes or global securities, or, collectively, global securities. The global securities will be deposited with, or on behalf of, The Depository Trust Company, New York, New York, as depository, or DTC, and registered in the name of Cede & Co., the nominee of DTC. Unless and until it is exchanged for individual certificates evidencing securities under the limited circumstances described below, a global security may not be transferred except as a whole by the depository to its nominee or by the nominee to the depository, or by the depository or its nominee to a successor depository or to a nominee of the successor depository.

DTC has advised us that it is:

- a limited-purpose trust company organized under the New York Banking Law.
- a “banking organization” within the meaning of the New York Banking Law.
- a member of the Federal Reserve System.
- a “clearing corporation” within the meaning of the New York Uniform Commercial Code. and
- a “clearing agency” registered pursuant to the provisions of Section 17A of the Exchange Act.

DTC holds securities that its participants deposit with DTC. DTC also facilitates the settlement among its participants of securities transactions, such as transfers and pledges, in deposited securities through electronic computerized book-entry changes in participants’ accounts, thereby eliminating the need for physical movement of securities certificates. “Direct participants” in DTC include securities brokers and dealers, including underwriters, banks, trust companies, clearing corporations and other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation, or DTCC. DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others, which we sometimes refer to as indirect participants, that clear through or maintain a custodial relationship with a direct participant, either directly or indirectly. The rules applicable to DTC and its participants are on file with the SEC.

Purchases of securities under the DTC system must be made by or through direct participants, which will receive a credit for the securities on DTC’s records. The ownership interest of the actual purchaser of a security, whom we sometimes refer to as a beneficial owner, is in turn recorded on the direct and indirect participants’ records. Beneficial owners of securities will not receive written confirmation from DTC of their purchases. However, beneficial owners are expected to receive written confirmations providing details of their transactions, as well as periodic statements of their holdings, from the direct or indirect participants through which they purchased securities. Transfers of ownership interests in global securities are to be accomplished by entries made on the books of participants acting on behalf of beneficial owners. Beneficial owners will not receive certificates representing their ownership interests in the global securities, except under the limited circumstances described below.

To facilitate subsequent transfers, all global securities deposited by direct participants with DTC will be registered in the name of DTC’s partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of securities with DTC and their registration in the name of Cede & Co. or such other nominee will not change the beneficial ownership of the securities. DTC has no knowledge of the actual beneficial owners of the securities. DTC’s records reflect only the identity of the direct participants to whose accounts the securities are credited, which may or may not be the beneficial owners. The participants are responsible for keeping account of their holdings on behalf of their customers.

So long as the securities are in book-entry form, you will receive payments and may transfer securities only through the facilities of the depository and its direct and indirect participants. We will maintain an office or agency in the location specified in the prospectus supplement for the applicable securities, where notices and demands in respect of the securities and the indenture may be delivered to us and where certificated securities may be surrendered for payment, registration of transfer or exchange.

Conveyance of notices and other communications by DTC to direct participants, by direct participants to indirect participants and by direct participants and indirect participants to beneficial owners will be governed by arrangements among them, subject to any legal requirements in effect from time to time.

Redemption notices will be sent to DTC. If less than all of the securities of a particular series are being redeemed, DTC's practice is to determine by lot the amount of the interest of each direct participant in the securities of such series to be redeemed.

Neither DTC nor Cede & Co. (or such other DTC nominee) will consent or vote with respect to the securities. Under its usual procedures, DTC will mail an omnibus proxy to us as soon as possible after the record date. The omnibus proxy assigns the consenting or voting rights of Cede & Co. to those direct participants to whose accounts the securities of such series are credited on the record date, identified in a listing attached to the omnibus proxy.

So long as securities are in book-entry form, we will make payments on those securities to the depository or its nominee, as the registered owner of such securities, by wire transfer of immediately available funds. If securities are issued in definitive certificated form under the limited circumstances described below and if not otherwise provided in the description of the applicable securities herein or in the applicable prospectus supplement, we will have the option of making payments by check mailed to the addresses of the persons entitled to payment or by wire transfer to bank accounts in the United States designated in writing to the applicable trustee or other designated party at least 15 days before the applicable payment date by the persons entitled to payment, unless a shorter period is satisfactory to the applicable trustee or other designated party.

Redemption proceeds, distributions and dividend payments on the securities will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit direct participants' accounts upon DTC's receipt of funds and corresponding detail information from us on the payment date in accordance with their respective holdings shown on DTC records. Payments by participants to beneficial owners will be governed by standing instructions and customary practices, as is the case with securities held for the account of customers in bearer form or registered in "street name." Those payments will be the responsibility of participants and not of DTC or us, subject to any statutory or regulatory requirements in effect from time to time. Payment of redemption proceeds, distributions and dividend payments to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC, is our responsibility, disbursement of payments to direct participants is the responsibility of DTC, and disbursement of payments to the beneficial owners is the responsibility of direct and indirect participants.

Except under the limited circumstances described below, purchasers of securities will not be entitled to have securities registered in their names and will not receive physical delivery of securities. Accordingly, each beneficial owner must rely on the procedures of DTC and its participants to exercise any rights under the securities and the indenture.

The laws of some jurisdictions may require that some purchasers of securities take physical delivery of securities in definitive form. Those laws may impair the ability to transfer or pledge beneficial interests in securities.

DTC may discontinue providing its services as securities depository with respect to the securities at any time by giving reasonable notice to us. Under such circumstances, in the event that a successor depository is not obtained, securities certificates are required to be printed and delivered.

As noted above, beneficial owners of a particular series of securities generally will not receive certificates representing their ownership interests in those securities. However, if:

- DTC notifies us that it is unwilling or unable to continue as a depository for the global security or securities representing such series of securities or if DTC ceases to be a clearing agency registered under the Exchange Act at a time when it is required to be registered and a successor depository is not appointed within 90 days of the notification to us or of our becoming aware of DTC's ceasing to be so registered, as the case may be.

- we determine, in our sole discretion, not to have such securities represented by one or more global securities, or
- an Event of Default has occurred and is continuing with respect to such series of securities,

then we will prepare and deliver certificates for such securities in exchange for beneficial interests in the global securities. Any beneficial interest in a global security that is exchangeable under the circumstances described in the preceding sentence will be exchangeable for securities in definitive certificated form registered in the names that the depository directs. It is expected that these directions will be based upon directions received by the depository from its participants with respect to ownership of beneficial interests in the global securities.

Euroclear and Clearstream

If so provided in the applicable prospectus supplement, you may hold interests in a global security through Clearstream Banking S.A., which we refer to as Clearstream, or Euroclear Bank S.A./N.V., as operator of the Euroclear System, which we refer to as Euroclear, either directly if you are a participant in Clearstream or Euroclear or indirectly through organizations that are participants in Clearstream or Euroclear. Clearstream and Euroclear will hold interests on behalf of their respective participants through customers' securities accounts in the names of Clearstream and Euroclear, respectively, on the books of their respective U.S. depositories, which in turn will hold such interests in customers' securities accounts in such depositories' names on DTC's books.

Clearstream and Euroclear are securities clearance systems in Europe. Clearstream and Euroclear hold securities for their respective participating organizations and facilitate the clearance and settlement of securities transactions between those participants through electronic book-entry changes in their accounts, thereby eliminating the need for physical movement of certificates.

Payments, deliveries, transfers, exchanges, notices and other matters relating to beneficial interests in global securities owned through Euroclear or Clearstream must comply with the rules and procedures of those systems. Transactions between participants in Euroclear or Clearstream, on one hand, and other participants in DTC, on the other hand, are also subject to DTC's rules and procedures.

Investors will be able to make and receive through Euroclear and Clearstream payments, deliveries, transfers and other transactions involving any beneficial interests in global securities held through those systems only on days when those systems are open for business. Those systems may not be open for business on days when banks, brokers and other institutions are open for business in the United States.

Cross-market transfers between participants in DTC, on the one hand, and participants in Euroclear or Clearstream, on the other hand, will be effected through DTC in accordance with the DTC's rules on behalf of Euroclear or Clearstream, as the case may be, by their respective U.S. depositories. However, such cross-market transactions will require delivery of instructions to Euroclear or Clearstream, as the case may be, by the counterparty in such system in accordance with the rules and procedures and within the established deadlines (European time) of such system. Euroclear or Clearstream, as the case may be, will, if the transaction meets its settlement requirements, deliver instructions to its U.S. depository to take action to effect final settlement on its behalf by delivering or receiving interests in the global securities through DTC, and making or receiving payment in accordance with normal procedures for same-day fund settlement. Participants in Euroclear or Clearstream may not deliver instructions directly to their respective U.S. depositories.

Due to time zone differences, the securities accounts of a participant in Euroclear or Clearstream purchasing an interest in a global security from a direct participant in DTC will be credited, and any such crediting will be reported to the relevant participant in Euroclear or Clearstream, during the securities settlement processing day (which must be a business day for Euroclear or Clearstream) immediately following the settlement date of DTC. Cash received in Euroclear or Clearstream as a result of sales of interests in a global security by or through a participant in Euroclear or Clearstream to a direct participant in DTC will be received with value on the settlement date of DTC but will be available in the relevant Euroclear or Clearstream cash account only as of the business day for Euroclear or Clearstream following DTC's settlement date.

Other

The information in this section of this prospectus concerning DTC, Clearstream, Euroclear and their respective book-entry systems has been obtained from sources that we believe to be reliable, but we do not take responsibility for this information. This information has been provided solely as a matter of convenience. The rules and procedures of DTC, Clearstream and Euroclear are solely within the control of those organizations and could change at any time. Neither we nor the trustee nor any agent of ours or of the trustee has any control over those entities and none of us takes any responsibility for their activities. You are urged to contact DTC, Clearstream and Euroclear or their respective participants directly to discuss those matters. In addition, although we expect that DTC, Clearstream and Euroclear will perform the foregoing procedures, none of them is under any obligation to perform or continue to perform such procedures and such procedures may be discontinued at any time. Neither we nor any agent of ours will have any responsibility for the performance or nonperformance by DTC, Clearstream and Euroclear or their respective participants of these or any other rules or procedures governing their respective operations.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods or through underwriters or dealers, through agents and/or directly to one or more purchasers. The securities may be distributed from time to time in one or more transactions:

- at fixed prices, which may be changed.
- at market prices prevailing at the time of sale.
- at prices related to such prevailing market prices. or
- at negotiated prices.

Each time that we sell securities covered by this prospectus, we will provide a prospectus supplement or supplements that will describe the method of distribution and set forth the terms and conditions of the offering of such securities, including the offering price of the securities and the proceeds to us, if applicable.

Offers to purchase the securities being offered by this prospectus may be solicited directly. Agents may also be designated to solicit offers to purchase the securities from time to time. Any agent involved in the offer or sale of our securities will be identified in a prospectus supplement.

If a dealer is utilized in the sale of the securities being offered by this prospectus, the securities will be sold to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If an underwriter is utilized in the sale of the securities being offered by this prospectus, an underwriting agreement will be executed with the underwriter at the time of sale and the name of any underwriter will be provided in the prospectus supplement that the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we or the purchasers of securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for which they may act as agent. Unless otherwise indicated in a prospectus supplement, an agent will be acting on a best efforts basis and a dealer will purchase securities as a principal, and may then resell the securities at varying prices to be determined by the dealer.

Any compensation paid to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers will be provided in the applicable prospectus supplement. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof and to reimburse those persons for certain expenses.

Any Class A common stock that we issue and sell will be listed on the Nasdaq Global Market, but any other securities may or may not be listed on a national securities exchange. To facilitate the offering of securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than were sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

We may engage in at the market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. In addition, we may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be named in the applicable prospectus supplement (or a post-effective amendment). In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

The specific terms of any lock-up provisions in respect of any given offering will be described in the applicable prospectus supplement.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

LEGAL MATTERS

K&L Gates LLP, Boston, Massachusetts, will pass upon certain legal matters relating to the issuance and sale of the securities offered hereby on our behalf. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

BDO China Shu Lun Pan Certified Public Accountants LLP, our independent registered public accounting firm in the People's Republic of China, has audited our consolidated financial statements at, and for the years ended, December 31, 2017 and 2016, as set forth in their report incorporated by reference herein. We have incorporated by reference herein the consolidated financial statements in reliance on said firm's report, given on their authority as experts in accounting and auditing.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following (other than the fees of the Securities and Exchange Commission, or SEC, and the Financial Industry Regulatory Authority, or FINRA) are estimates of the expenses that the registrant may incur in connection with the offering and sale of the securities being registered hereby. All such expenses are to be paid by the registrant.

SEC registration fee	\$	12,120	
FINRA filing fee		15,500	
Accounting fees and expenses		*	
Exchange listing fee		*	
Legal fees and expenses		*	
Printing expenses		*	
Transfer agent fees and expenses		*	
Trustee fees and expenses		*	
Warrant agent fees and expenses		*	
Miscellaneous		*	
Total		*	

* Because these amounts are based on the securities offered and the number of issuances, they cannot be estimated at this time and will be reflected in the applicable prospectus supplements.

Item 15. Indemnification of Directors and Officers

Sections 145 and 102(b)(7) of the General Corporation Law of the State of Delaware provide that a corporation may indemnify any person made a party to an action by reason of the fact that the person was a director, officer, employee or agent of the corporation or is or was serving at the request of a corporation against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action if the person acted in good faith and in a manner the person reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful, except that, in the case of an action by or in right of the corporation, no indemnification may generally be made in respect of any claim as to which the person is adjudged to be liable to the corporation.

The registrant's charter contains provisions that eliminate, to the maximum extent permitted by the General Corporation Law of the State of Delaware, the personal liability of the registrant's directors for monetary damages for breach of their fiduciary duties as directors. The registrant's bylaws provide that the registrant must indemnify its directors and officers and may indemnify its employees and other agents to the fullest extent permitted by the General Corporation Law of the State of Delaware.

The registrant has entered into indemnification agreements with its directors and executive officers, in addition to the indemnification provided by its bylaws, and intends to enter into indemnification agreements with any new directors and executive officers in the future.

The registrant has purchased and intends to maintain insurance on behalf of any person who is or was a director or officer of the registrant against any loss arising from any claim asserted against the person and incurred by the person in any such capacity, subject to certain exclusions.

In any underwriting agreement the registrant enters into in connection with the offering of securities being registered hereby, the underwriters may agree to indemnify, under certain conditions, the registrant's directors and officers (as well as certain other persons) against certain liabilities arising in connection with such offering.

Item 16. Exhibits

Exhibit No.	Description
1.01*	Form of Underwriting Agreement
3.01	Restated Certificate of Incorporation of ACM Research, Inc., as amended
3.02	Restated Bylaws of ACM Research, Inc.
4.01	Restated Certificate of Incorporation of ACM Research, Inc., as amended
4.02	Restated Bylaws of ACM Research, Inc.
4.03	Second Amended and Restated Registration Rights Agreement between ACM Research, Inc. and certain of its stockholders
4.04	Form of Class A Common Stock Certificate
4.05*	Form of Preferred Stock Certificate
4.06*	Form of Senior Indenture
4.07*	Form of Subordinated Indenture
4.08*	Form of Senior Note
4.09*	Form of Subordinated Note
4.10*	Form of Warrant
4.11*	Form of Warrant Agreement
4.12*	Form of Unit Agreement
5.01*	Opinion of K&L Gates LLP
23.01	Consent of BDO China Shu Lun Pan Certified Public Accountants LLP
23.02*	Consent of K&L Gates LLP (included in Exhibit 5.01)
24.01	Powers of Attorney (included on the signature page of the Registration Statement)
25.01*	Statement of Eligibility on Form T-1 under the Trust Indenture Act of 1939 of the Trustee under the Senior Indenture
25.02*	Statement of Eligibility on Form T-1 under the Trust Indenture Act of 1939 of the Trustee under the Subordinated Indenture

* To be filed by amendment or incorporated by reference in connection with an offering of securities.

Item 17. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933.

(ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) that, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement. and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii), and (a)(1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is a part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered that remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
- (A) each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement. and
- (B) each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:
- The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
- (i) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424.
- (ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant.
- (iii) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant. and
- (iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.
- (d) The undersigned registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act of 1939 in accordance with the rules and regulations prescribed by the SEC under Section 305(b)(2) of the Trust Indenture Act of 1939.

**SECOND AMENDED AND RESTATED
REGISTRATION RIGHTS AGREEMENT**

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THIS SECOND AMENDED AND RESTATED REGISTRATION RIGHTS AGREEMENT (this “*Agreement*”) is made as of October 16, 2017, by and among ACM Research, Inc., a Delaware corporation (the “*Company*”), Shengxin (Shanghai) Management Consulting Limited Partnership (“*SMC*”), Xinxin (Hongkong) Capital Co., Limited and Victorious Way Limited. Certain capitalized terms used herein are defined in Section 1.

RECITALS

A. The Company and SMC previously entered into a Registration Rights Agreement dated as of March 10, 2017, pursuant to which the Company provided SMC with certain registration rights with respect to SMC’s equity interests in the Company, which agreement was subsequently amended and restated pursuant to the Amended and Restated Registration Rights Agreement dated as of September 24, 2017 (the “*Original Agreement*”).

B. Contemporaneously herewith, each of Xinxin (Hongkong) Capital Co., Limited and Victorious Way Limited is entering into a Stock Purchase Agreement dated as of the date hereof, pursuant to which it proposes to purchase Class A Shares subject to the respective terms and conditions set forth therein, which conditions include the execution and delivery of this Agreement.

C. In order to facilitate such purchases of Class A Shares, the Company and SMC desire to amend and restate the Original Agreement in its entirety as provided herein.

The parties hereto agree as follows:

1. Definitions. For purposes of this Agreement:

(a) “*Adoption Agreement*” means an agreement in the form attached as EXHIBIT A or in such other form as the Company may require from time to time.

(b) “*Affiliate*” means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including any general partner, managing member, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person.

(c) “*Class A Shares*” means shares of Class A Common Stock of the Company.

(d) “*Comprehensive Rights Holder*” means a party listed on SCHEDULE II.

(e) “*Damages*” means any loss, damage, claim or liability (joint or several) to which a party to this Agreement may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect to this Agreement) arises out of or is based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements to this Agreement; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

(f) “*Demand Registrable Securities*” means Class A Shares that are held by the Comprehensive Rights Holders and listed across from a Comprehensive Rights Holder’s name on SCHEDULE II.

(g) “*Exchange Act*” means the U.S. Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(h) “*Excluded Registration*” means: (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Class A Shares being registered are Class A Shares issuable upon conversion of debt securities that are also being registered.

(i) “*Form S-1*” means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

(j) “*Form S-3*” means such form under the Securities Act as in effect on the date of this Agreement or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

(k) “*Holder*” means an Incidental Rights Holder or Comprehensive Rights Holder.

(l) “*Immediate Family Member*” means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships, of a natural person referred to herein.

(m) “*Incidental Rights Holders*” a party listed on SCHEDULE I from time to time, including any subsequent securities holders, or transferees, who become parties hereto as “Incidental Rights Holders” pursuant to Sections 12(a) and 12(b).

(n) “*Initiating Holders*” means any Holder or Holders of a majority of the then-outstanding Demand Registrable Securities.

(o) “*IPO*” means the Company’s first underwritten public offering of its Class A Shares under the Securities Act.

(p) “*Original Agreement*” has the meaning set forth in Recital A.

(q) “*Person*” means any individual, corporation, partnership, trust, limited liability company, association or other entity.

(r) “*Preferred Series*” means Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock or Series F Preferred Stock of the Company.

(s) “*Registrable Securities*” means:

- (i) Class A Shares that are held by the Incidental Rights Holders and listed across from an Incidental Rights Holder’s name on SCHEDULE I;
- (ii) Demand Registrable Securities;
- (iii) any Class A Shares that are issued or issuable (directly or indirectly) upon conversion or exercise of any other securities of the Company and that are held by the Incidental Rights Holders and listed across from an Incidental Rights Holder’s name on SCHEDULE I; and
- (iv) any Class A Shares that are issued as (or issuable upon the conversion or exercise of any warrant, right or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the securities referenced in clauses (i), (ii) and (iii) above;

excluding, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to [Section 12\(a\)](#) and any shares for which registration rights have terminated pursuant to [Section 11](#).

(t) “*Registrable Securities then outstanding*” means the sum of (i) the number of outstanding Class A Shares that are Registrable Securities (including the Demand Registrable Securities) and (ii) the number of Class A Shares issuable (directly or indirectly) pursuant to then exercisable or convertible securities that are Registrable Securities.

(u) “*SEC*” means the U.S. Securities and Exchange Commission.

(v) “*SEC Rule 144*” means Rule 144 promulgated by the SEC under the Securities Act.

(w) “*SEC Rule 145*” means Rule 145 promulgated by the SEC under the Securities Act.

(x) “*Securities Act*” means the U.S. Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

(y) “*Selling Expenses*” means all underwriting discounts, selling commissions, stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in [Section 6](#).

2. Registration Rights. The Company covenants and agrees as follows:

(a) *Demand Registration*.

(i) If, at any time at least 180 days after the closing date of the IPO, the Company receives a request from the Initiating Holders that the Company file a Form S-1 registration statement covering either (x) the potential sale of all or a portion of the Registrable Securities then outstanding with an anticipated aggregate offering price (excluding the offering price of any shares subject to an over-allotment option) of at least \$7,500,000 or (y) all of the Registrable Securities then held by a Comprehensive Rights Holder whose rights under this Agreement have not terminated pursuant to Section 11, then the Company shall: (A) within ten days after the date such request is given, give notice thereof (the “*Demand Notice*”) to all Holders other than the Initiating Holders; and (B) as soon as practicable, and in any event within sixty days after the date such request is given by the Initiating Holders, use its reasonable best efforts to file and make effective a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty days of the date the Demand Notice is given, and in each case, subject to the limitations of Section 2(a)(iii) and Section 3.

(ii) If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from the Initiating Holders that the Company file a Form S-3 registration statement covering either (x) the potential sale of all or a portion of the Registrable Securities then outstanding with an anticipated aggregate offering price (excluding the offering price of any shares subject to an over-allotment option) of at least \$3,750,000 or (y) all of the Registrable Securities then held by a Comprehensive Rights Holder whose rights under this Agreement have not terminated pursuant to Section 11, then the Company shall: (A) within ten days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (B) as soon as practicable, and in any event within 45 days after the date such request is given by the Initiating Holders, file and make effective a Form S-3 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty days of the date the Demand Notice is given, and in each case, subject to the limitations of Section 2(a)(iii) and Section 3.

(iii) Notwithstanding the foregoing obligations, if the Company furnishes to Initiating Holders requesting a registration pursuant to this Section 2(a) a certificate signed by the Company’s Chief Executive Officer stating that in the good faith judgment of the Board of Directors of the Company it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (A) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company, (B) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential, or (C) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than 120 days after the request of the Initiating Holders is given; *provided, however*, that the Company may not invoke this right more than once in any consecutive twelve-month period; and *provided further* that the Company shall not register any securities for its own account or that of any other stockholder during such 120-day period other than Excluded Registrations.

(iv) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2(a) (A) after the Company has effected a total of four registrations pursuant thereto, or (B) if the Company has effected a registration pursuant to Section 2(a) within the six-month period immediately preceding the date of such request. The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2(a)(i) (A) during the period that is sixty days before the Company’s good faith estimate of the date of filing of, and ending on a date that is 180 days after the effective date of, a Company-initiated registration, *provided* that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective, or (B) if the Initiating Holders propose to dispose of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Section 2(a)(ii). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2(a)(ii) during the period that is thirty days before the Company’s good faith estimate of the date of filing of, and ending on a date that is ninety days after the effective date of, a Company-initiated registration, *provided* that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective. A registration shall not be counted as “effected” for purposes of this Section 2(a)(iv) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Section 6, in which case such withdrawn registration statement shall be counted as “effected” for purposes of this Section 2(a)(iv).

(b) Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its Class A Shares under the Securities Act in connection with the public offering of such securities solely for cash (other than in: (A) the IPO or (B) an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty days after such notice is given by the Company, the Company shall, subject to the provisions of Section 3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 2(b) before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Section 6.

3. Underwriting Requirements.

(a) If, pursuant to Section 2(a), the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Section 2(a), and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Company and shall be reasonably acceptable to a majority in interest of the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their Registrable Securities through such underwriting shall (together with the Company as provided in Section 4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Section 3(a), if the managing underwriter advises the Initiating Holders in writing that marketing factors require a limitation on the number of Class A Shares to be underwritten, then the Initiating Holders shall so advise all Holders that otherwise would be underwritten pursuant hereto and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities to be included in such underwriting shall not be reduced unless all other Class A Shares are first entirely excluded from the underwriting. To facilitate the allocation of Class A Shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated for sale by any Holder to the nearest 100 Registrable Securities.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Section 2(b), the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, that the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, or (ii) the number of Registrable Securities included in the offering be reduced below thirty percent of the total number of securities included in such offering. For purposes of this Section 3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

4. **Obligations of the Company.** Whenever required under this Agreement to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to 180 days, in the case of a registration statement pursuant to clause (y) of Section 2(a)(i) (regardless of whether such registration also complies with clause (x) of Section 2(a)(i) or clause (y) of Section 2(a)(ii) (regardless of whether such registration also complies with clause (x) of Section 2(a)(ii)), or otherwise 120 days or, if earlier, until the distribution contemplated in the registration statement has been completed, provided that such 180-day or 120-day period (as the case may be) shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Class A Shares (or other securities) of the Company, from selling any securities included in such registration;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders, *provided* that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) promptly make available for inspection by the selling Holders, any managing underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(h) notify each selling Holder, promptly after the Company receives notice of this Agreement, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(i) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

5. **Furnish Information.** It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Agreement, with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

6. **Expenses of Registration.** All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to this Agreement, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements, not to exceed \$50,000, of one counsel for the selling Holders ("*Selling Holder Counsel*"), shall be borne and paid by the Company; *provided, however*, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 2(a) if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Section 2(a); *provided further* that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Section 2(a). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 6 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

7. **Delay of Registration.** No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Agreement.

8. **Indemnification.** If any Registrable Securities are included in a registration statement under this Agreement:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder, and each Person, if any, that controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred, provided that the indemnity agreement contained in this Section 8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred, provided that the indemnity agreement contained in this Section 8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Sections 8(b) and (d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect to this Agreement is to be made against any indemnifying party under this Section 8, give the indemnifying party notice of the commencement of this Agreement. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense of this Agreement with counsel mutually satisfactory to the parties, provided that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Section 8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Section 8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either: (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Section 8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Section 8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party to this Agreement for which indemnification is provided under this Section 8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission, provided that, in any such case (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation and provided further that in no event shall a Holder's liability pursuant to this Section 8(d), when combined with the amounts paid or payable by such Holder pursuant to Section 8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Section 8 shall survive the completion of any offering of Registrable Securities in a registration under this Agreement, and otherwise shall survive the termination of this Agreement.

9. Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies) and (ii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

10. Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of a majority of the Registrable Securities then outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company that would (a) provide to such holder the right to include securities in any registration on other than either a pro rata basis with respect to the Registrable Securities or on a subordinate basis after all Holders have had the opportunity to include in the registration and offering all shares of Registrable Securities they wish to so include or (b) allow such holder or prospective holder to initiate a demand for registration of any securities held by such holder or prospective holder.

11. Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Section 2(a) or 2(b) shall terminate upon the earliest to occur of:

(a) such time as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's Registrable Securities shares without restriction by volume limitations; and

(b) the fifth anniversary of the closing of the IPO.

12. Changes in Holders and Updating of Schedules.

(a) *Successors and Assigns*. The rights of a Holder, either as an Incidental Rights Holder or a Comprehensive Rights Holder, under this Agreement may be assigned (but only with all related obligations) by such Holder to a transferee of Registrable Securities that is (i) an Affiliate of such Holder or (ii) an Immediate Family Member of such Holder or a trust for the benefit of such individual Holder or one or more of such Holder's Immediate Family Members, provided that (A) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred and (B) such transferee agrees, by executing and delivering an Adoption Agreement to the Company, to be bound by and subject to the terms and conditions of this Agreement. Upon such execution and delivery of an Adoption Agreement by such transferee and the Company, such transferee shall be deemed to be a party to this Agreement and an Incidental Rights Holder or a Comprehensive Rights Holder, to the same extent as the transferring Holder, as if such transferee's signature appeared on the signature page of this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties to this Agreement or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided in Section 12(b)(i), Section 12(b)(ii) or elsewhere herein.

(b) *Additional Holders*.

(i) Each of Ninebell Co., Ltd. (with respect to 133,334 Class A Shares purchased from the Company as of September 11, 2017), Pudong Science and Technology (Cayman) Co., Ltd. (with respect to 1,119,576 Class A Shares purchased from the Company as of September 8, 2017), Shanghai Science and Technology Venture Capital Co., Ltd. (with respect to 4,998,508 shares of Series E Preferred Stock of the Company purchased from the Company as of August 31, 2017), and Zhangjiang AJ Company Limited (with respect to 787,098 Class A Shares purchased from the Company as of September 8, 2017) may, at its election, become subject to the terms of this Agreement as an Incidental Rights Holder by executing and delivering an Adoption Agreement. Upon the execution and delivery of an Adoption Agreement to the Company by any such Person (with respect to the securities referenced above), the Company shall countersign such Adoption Agreement and (A) such Person shall be deemed to be a party to this Agreement as if such Person's signature appeared on the signature pages of this Agreement and shall be deemed to be an Incidental Rights Holder and (B) such Person shall be added to SCHEDULE I in accordance with Section 12(c).

(ii) Each Person who holds shares of any Preferred Series shall, automatically without the need to execute or deliver an adoption or joinder agreement, become subject to the terms of this Agreement as an Incidental Rights Holder with respect to such shares upon the receipt by ACM of a waiver and/or consent, executed by the holders of a majority of the outstanding shares of such Preferred Series, terminating all of the registration rights currently set forth in one or more purchase agreements with respect to shares of such Preferred Series, all satisfactory to the Company in form and substance. Upon delivery of such a waiver and/or consent with respect to shares of a Preferred Series, (A) each Person who is a holder of record of shares of such Preferred Series as of the date of such delivery shall be deemed to be a party to this Agreement as if such Person's signature appeared on the signature pages of this Agreement and shall be deemed to be an Incidental Rights Holder and (B) such Person shall be added to SCHEDULE I in accordance with Section 12(c), it being understood that for such purpose the initial address of such Person shall be its record address in the stock register for such Preferred Series.

(iii) At the election of the Company, any Person may become subject to the terms of this Agreement as an Incidental Rights Holder at any time after the date hereof by executing and delivering an Adoption Agreement. Upon the execution and delivery of an Adoption Agreement by such Person and the Company, (A) such Person shall be deemed to be a party to this Agreement as if such Person's signature appeared on the signature pages of this Agreement and shall be deemed to be an Incidental Rights Holder and (B) such Person shall be added to SCHEDULE I in accordance with Section 12(c).

(c) The Company shall maintain each of SCHEDULE I and SCHEDULE II, which shall set forth:

- (i) in SCHEDULE I, the names of all Incidental Rights Holders from time to time, including Incidental Rights Holders who become party to this Agreement in accordance with Section 12(a) or clause (i), (ii) or (iii) of Section 12(b), and in SCHEDULE II, the names of all Comprehensive Rights Holders from time to time, including Comprehensive Rights Holders who become party to this Agreement in accordance with Section 12(a);
- (ii) the respective contact address of each Holder, as provided to the Company by such Holder at the time such Holder becomes party to this Agreement, becomes subject to this Agreement or as subsequently provided to the Company in accordance with Section 13(d); and
- (iii) the numbers and types of securities of the Company held by each Holder that constitute Registrable Securities or that are convertible or exercisable for Registrable Securities.

The Company shall update SCHEDULE I or SCHEDULE II, as the case may be, upon any change in, or addition of, a Holder in accordance with Section 12(a) or Section 12(b), any change in the contact address of a Holder delivered to the Company in accordance with Section 13(d), or any other change or event that the Company determines, in good faith, is necessary or desirable to fulfill the purposes of SCHEDULE I or SCHEDULE II. Upon request of any Holder from time to time, the Company shall promptly deliver to such Holder, in accordance with Section 13(d), a copy of the then-current versions of SCHEDULE I and SCHEDULE II.

13. Miscellaneous.

(a) *Governing Law.* This Agreement shall be governed by the internal law of the State of Delaware.

(b) *Counterparts.* This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. Electronic Signatures in Global and National Commerce Act, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

(c) *Construction.* As used in this Agreement:

- (i) headings used in this Agreement are for convenience of reference only and shall not, for any purpose, be deemed a part of this Agreement;
- (ii) any references herein to a Section or Exhibit refer to a Section of, or Exhibit attached to, this Agreement, unless specified otherwise;
- (iii) the words “herein,” “hereof,” “hereby,” “hereto” and “hereunder” refer to this Agreement as a whole;
- (iv) the words “include,” “includes” and “including” as used herein shall not be construed so as to exclude any other thing not referred to or described;
- (v) the word “or” is not exclusive;
- (vi) the definition given for any term in this Agreement shall apply equally to both the singular and plural forms of the term defined;
- (vii) whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms;
- (viii) unless the context otherwise requires, (A) references herein to an agreement, instrument or other document mean such agreement, instrument or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof and (B) references herein to a statute means such statute as amended from time to time and includes any successor legislation thereto and any rules and regulations promulgated thereunder; and
- (ix) this Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the party drafting an instrument or causing any instrument to be drafted.

(d) Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon (i) personal delivery to the party to be notified, (ii) if sent by electronic mail, then (A) when sent, if sent between 9 a.m. and 5 p.m., Pacific time, on a Business Day or (B) as of 9 a.m. Pacific time on the next Business Day, if sent at any other time, (iii) if sent by U.S. registered or certified mail, return receipt requested, postage prepaid, the earlier of actual receipt and the fifth Business Day after having been deposited with the U.S. Postal Service, or (iv) if sent via an internationally recognized overnight courier, freight prepaid, specifying next or two Business Day delivery, with written verification of receipt, two Business Days after deposit with such courier. “*Business Day*” means any day other than (i) a Saturday or Sunday or (ii) a day on which the Federal Reserve Bank of San Francisco is closed. All communications shall be sent to the respective Holders at their addresses as set forth on Schedule I or Schedule II, as applicable, or to the Company at its principal office, to the attention of the Chief Executive Officer, or by email to dwang@acmrcsh.com, or to such other street or email address as subsequently modified by written notice given in accordance with this Section 13(d). If notice is given to the Company, a copy shall also be sent to Mark L. Johnson at K&L Gates LLP, State Street Financial Center, One Lincoln Street, Boston, Massachusetts 02111.

(e) Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of the Company and the holders of a majority of the Registrable Securities then outstanding, *provided* that any provision of this Agreement may be waived by any waiving party on such party’s own behalf, without the consent of any other party. Notwithstanding the foregoing, this Agreement may not be amended or terminated and the observance of any term of this Agreement may not be waived with respect to any Holder without the written consent of such Holder, unless such amendment, termination, or waiver applies to all Holders in the same fashion (it being agreed that a waiver of the provisions of this Agreement with respect to a particular transaction shall be deemed to apply to all Holders in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Holders may nonetheless, by agreement with the Company, purchase securities in such transaction). Further, this Agreement may not be amended, and no provision hereof may be waived, in each case, in any way that would adversely affect the rights of the Comprehensive Rights Holders hereunder in a manner disproportionate to any adverse effect such amendment or waiver would have on the rights of the Holders hereunder (it being agreed that any modification of the terms of Section 2(a) in any fashion shall be deemed to be disproportionate for such purposes), without the written consent of the holders of at least a majority of the Demand Registrable Securities then outstanding. The Company shall give prompt notice of any amendment or termination of this Agreement or waiver hereunder to any party to this Agreement that did not consent in writing to such amendment, termination, or waiver. Any amendment, termination, or waiver effected in accordance with this Section 13(e) shall be binding on all parties to this Agreement, regardless of whether any such party has consented to this Agreement. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

(f) Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

(g) Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

(h) Entire Agreement. This Agreement (including any Schedules and Exhibits to this Agreement) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter of this Agreement, and any other written or oral agreement relating to the subject matter of this Agreement existing between the parties is expressly canceled.

(i) Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of Delaware and any federal court located in the State of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of Delaware or any federal court located in the State of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter of this Agreement may not be enforced in or by such court. Each party will bear its own costs in respect of any disputes arising under this Agreement.

(j) Waiver of Jury Trial. EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

(k) Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default heretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

(l) Amendment and Restatement of the Original Agreement. The Original Agreement is hereby amended in its entirety and restated herein. Upon such execution and delivery, all provisions of, rights granted and covenants made in the Original Agreement are hereby waived, released and superseded in their entirety and shall have no further force or effect.

(m) Additional Registration Rights. While Xinxin (Hongkong) Capital Co., Limited or Victorious Way Limited continues to be a Comprehensive Rights Holder under this Agreement whose rights have not terminated pursuant to Section 11, the Company shall not, without the prior written consent of each such Comprehensive Rights Holder, enter into any arrangement (other than pursuant to this Agreement) with any holder or prospective holder of securities of the Company under which such Person shall have the right to request or demand that the Company file a registration statement covering the potential sale of all or a portion of such securities under the Securities Act.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, each of the parties has executed this Agreement or caused the same to be executed by its duly authorized representative as of the date first written above.

ACM RESEARCH, INC.

By: /s/ David H. Wang
David H. Wang
President and Chief Executive Officer

SHENGXIN (SHANGHAI) MANAGEMENT
CONSULTING LIMITED PARTNERSHIP

By: /s/ Jian Wang
Jian Wang
General Partner

Address:
Rm. 210-32, 2nd Fl., Building 1 38 Debao Rd.
Pilot Free Trade Zone
Shanghai, China
Email:

XINXIN (HONGKONG) CAPITAL CO., LIMITED

By: /s/ Xinxin (Hongkong) Capital Co., Limited
Name:
Title:

Address:
3rd Floor North, No. 7 Financial Street
Xicheng District, Beijing 100033, P. R. China
Email:

VICTORIOUS WAY LIMITED

By: /s/ Victorious Way Limited
Name:
Title:

Address:
Vistra Corporate Services Centre,
Wickhams Cay II, Road Town
Tortola, VG1110, British Virgin Islands
Email:

SIGNATURE PAGE TO SECOND AMENDED AND RESTATED REGISTRATION RIGHTS AGREEMENT

SCHEDULE I
Incidental Rights Holders

<i>Name</i>	<i>Securities</i>
SHENGXIN (SHANGHAI) MANAGEMENT CONSULTING LIMITED PARTNERSHIP Rm. 210-32, 2nd Fl., Building 1 38 Debao Rd. Pilot Free Trade Zone Shanghai, China Email: jian.wang@acmrcsh.com	Warrant dated March 14, 2017 issued by ACM Research, Inc. with respect to 397,502 Class A Shares (after giving effect to post-reverse split effected on September 13, 2017)

SCHEDULE II
Comprehensive Rights Holders

<i>Name</i>	<i>Securities</i>
XINXIN (HONGKONG) CAPITAL CO., LIMITED 3rd Floor North, No. 7 Financial Street Xicheng District, Beijing 100033, P. R. China	833,334 Class A Shares
VICTORIOUS WAY LIMITED Vistra Corporate Services Centre, Wickhams Cay II, Road Town Tortola, VG1110, British Virgin Islands	500,000 Class A Shares

EXHIBIT A

Adoption Agreement

This Adoption Agreement (this “*Adoption Agreement*”) is executed on _____, 20____, by the undersigned (“*Acquirer*”) pursuant to the terms of the Second Amended and Restated Registration Rights Agreement dated as of _____, 2017 (the “*Agreement*”), by and among ACM Research, Inc. and certain of its security holders, as such Agreement may be further amended or restated. Capitalized terms used but not defined in this Adoption Agreement shall have the respective meanings ascribed to such terms in the Agreement. By the execution of this Adoption Agreement, Acquirer agrees as follows.

1. Acknowledgement. Acquirer acknowledges that Acquirer is acquiring certain Registrable Securities (which term, for purposes of this Adoption Agreement, shall include securities convertible or exercisable for Registrable Securities) for one of the following reasons (*check the correct box*):
 - as a transferee of Registrable Securities from a party in such party’s capacity as an “Incidental Rights Holder,” bound by the Agreement in accordance with Section 12(a), and after such transfer, Acquirer shall be considered an “Incidental Rights Holder” for all purposes of the Agreement;
 - as a transferee of Registrable Securities from a party in such party’s capacity as a “Comprehensive Rights Holder,” bound by the Agreement in accordance with Section 12(a), and after such transfer, Acquirer shall be considered a “Comprehensive Rights Holder” for all purposes of the Agreement;
 - as a purchaser of Registrable Securities from the Company in accordance with Section 12(b)(i), after which Acquirer shall be considered an “Incidental Rights Holder” for all purposes of the Agreement;
 - as a holder of shares of a Preferred Series in accordance with Section 12(b)(ii), after which Acquirer shall be considered an “Incidental Rights Holder” for all purposes of the Agreement; or
 - as a holder of securities of the Company in accordance with Section 12(b)(iii), after which Acquirer shall be considered an “Incidental Rights Holder” for all purposes of the Agreement.
2. Agreement. Acquirer adopts the Agreement with the same force and effect as if Acquirer were originally a party to this Agreement.
3. Conflicts. In the event that the terms of the Agreement conflict with any other agreement pursuant to which Acquirer is bound, Acquirer expressly acknowledges and agrees that the terms of the Agreement shall govern.
4. Notice. Any notice required or permitted by the Agreement shall be given to Acquirer at the address or email address listed below Acquirer’s signature to this Agreement.

ACQUIRER:

ACCEPTED AND AGREED:

By:
Name:
Title:

ACM RESEARCH, INC.

Address:

By:
Name:

Email:

Title:

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

ACM Research, Inc.
42307 Osgood Road, Suite I
Fremont, California 94539
United States

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement on Form S-3 of ACM Research, Inc. (the "Company") of our report dated March 22, 2018, relating to the consolidated financial statements of the Company appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2017.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ BDO China Shu Lun Pan Certified Public Accountants LLP

BDO China Shu Lun Pan Certified Public Accountants LLP

Shenzhen, The People's Republic of China
December 10, 2018
