

**BY-LAWS
OF
CABOT CORPORATION**

(As Amended through January 8, 2016)

Section 1. LAW, CERTIFICATE OF INCORPORATION AND BY-LAWS

1.1 These by-laws are subject to the certificate of incorporation of the corporation. In these by-laws, references to law, the certificate of incorporation and by-laws mean the law, the provisions of the certificate of incorporation of the corporation and these by-laws as from time to time in effect.

Section 2. STOCKHOLDERS

2.1 Annual Meeting. The annual meeting of stockholders shall be held on such date and at such time as shall be designated by the board of directors each year (which date and time may subsequently be changed at any time, including the year any such designation occurs).

2.2 Special Meetings. A special meeting of the stockholders may be called at any time by the board of directors. Any such call shall state the place, time, and purposes of the meeting.

2.3 Place of Meeting; Adjournment. Meetings of the stockholders may be held at such place within or without the State of Delaware as may be designated by the board of directors in the call thereof. When any meeting is convened, the officer presiding at such meeting, if directed by the board of directors, may adjourn the meeting for a period of time not to exceed 30 days if (a) no quorum is present for the transaction of business or (b) the board of directors determines that adjournment is necessary or appropriate to enable the stockholders (i) to consider fully information which the board of directors determines has not been made sufficiently or timely available to stockholders or (ii) otherwise to exercise effectively their voting rights. The officer presiding at the meeting in such event shall announce the adjournment and date, time and place of reconvening and shall cause notice thereof to be posted at the place of meeting designated in the notice which was sent to the stockholders, and if such date is more than 10 days after the original date of the meeting the secretary or an assistant secretary shall give notice thereof in the manner provided in Section 2.4 of these by-laws.

2.4 Notice of Meetings. Except as otherwise provided by law, a written notice of each meeting of stockholders stating the place, day and hour thereof and, in the case of a special meeting, the purposes for which the meeting is called, shall be

given not less than ten nor more than 60 days before the meeting, to each stockholder entitled to vote thereat, and to each stockholder who, by law, by the certificate of incorporation or by these by-laws, is entitled to notice, by leaving such notice at the stockholder's residence or usual place of business, or by depositing it in the United States mail, postage prepaid, and addressed to such stockholder at the stockholder's address as it appears in the records of the corporation. Such notice shall be given by the secretary or an assistant secretary, or in the case of their death, incapacity or refusal, by another officer or person designated by the board of directors. As to any adjourned session of any meeting of stockholders, notice of the adjourned meeting need not be given if the time and place thereof are announced at the meeting at which the adjournment was taken except that if the adjournment is for more than 30 days or if after the adjournment a new record date is set for the adjourned session, notice of any such adjourned session of the meeting shall be given in the manner heretofore described. No notice of any meeting of stockholders or any adjourned session thereof need be given to a stockholder if a written waiver of notice, executed before or after the meeting or such adjourned session by such stockholder, is filed with the records of the meeting or if the stockholder attends such meeting without objecting at the beginning of the meeting to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any meeting of the stockholders or any adjourned session thereof need be specified in any written waiver of notice.

2.5 Quorum of Stockholders. At any meeting of the stockholders, a quorum as to any matter shall consist of a majority of the votes entitled to be cast on the matter, except where a larger quorum is required by law, by the certificate of incorporation or by these by-laws. If a quorum is present at an original meeting, a quorum need not be present at an adjourned session of that meeting. Shares of its own stock belonging to the corporation or to another corporation, if a majority of the shares entitled to vote in the election of directors of such other corporation is held, directly or indirectly, by the corporation, shall neither be entitled to vote nor be counted for quorum purposes; provided, however, that the foregoing shall not limit the right of any corporation to vote stock, including but not limited to its own stock, held by it in a fiduciary capacity.

2.6 Required Vote for Election of Directors. When a quorum is present at any meeting, a nominee for director shall be elected if the votes properly cast for such nominee's election exceed the votes properly cast against such nominee's election (abstentions shall not be considered to be votes cast); provided, however, that the directors shall be elected by a plurality of the votes properly cast at any meeting of stockholders for which (i) the corporation receives a notice that a stockholder has nominated a person for election as a director in compliance with the provisions for advance notice of nominations in Section 2.12 of these by-laws and (ii) such nomination has not been withdrawn on or prior to the tenth day preceding the date on which the corporation mails notice of the meeting to the stockholders. If nominees for director are to be elected by a plurality of the votes properly cast, stockholders shall not be permitted to vote against a nominee.

2.7 Required Vote for Other Matters. When a quorum is present at any meeting, a majority of the votes properly cast shall decide the question, except as otherwise required by law, by the certificate of incorporation or by these by-laws. If the corporation issues fractional shares of stock entitled to vote, holders of such fractional shares shall be entitled to exercise voting rights.

2.8 No Action Without Meetings. Any action required or permitted to be taken by stockholders of the corporation must be taken at a duly called annual or special meeting of the corporation and may not be taken by any consent in writing by such stockholders.

2.9 Proxy Representation. Every stockholder may authorize another person or persons to act for him or her by proxy in all matters in which a stockholder is entitled to participate, whether by waiving notice of any meeting, objecting to or voting or participating at a meeting. Every proxy must be signed by the stockholder or by his or her attorney-in-fact. No proxy shall be voted or acted upon after three years from its date unless such proxy provides for a longer period. A duly executed proxy shall be irrevocable if it states that it is irrevocable and, if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power. A proxy may be made irrevocable regardless of whether the interest with which it is coupled is an interest in the stock itself or an interest in the corporation generally. The authorization of a proxy may but need not be limited to specified action; provided, however, that if a proxy limits its authorization to a meeting or meetings of stockholders, unless otherwise specifically provided such proxy shall entitle the holder thereof to vote at any adjourned session but shall not be valid after the final adjournment thereof.

2.10 Inspectors. The directors or the person presiding at the meeting may, but need not, appoint one or more inspectors of election and any substitute inspectors to act at the meeting or any adjournment thereof. Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector at such meeting with strict impartiality and according to the best of his or her ability. The inspectors, if any, shall determine the number of shares of stock outstanding and the voting power of each, the shares of stock represented at the meeting, the existence of a quorum, the validity and effect of proxies, and shall receive votes or ballots, hear and determine all challenges and questions arising in connection with the right to vote, count and tabulate all votes, ballots or consents, determine the result, and do such acts as are proper to conduct the election or vote with fairness to all stockholders. On request of the person presiding at the meeting, the inspectors shall make a report in writing of any challenge, question or matter determined by them and execute a certificate of any fact found by them.

2.11 List of Stockholders. The secretary shall prepare and make, or cause to be prepared and made, at least ten days before every meeting of stockholders, a complete list of the stockholders entitled to vote at such meeting, arranged in

alphabetical order and showing the address of each stockholder and the number of shares registered in the name of each stockholder. The original or duplicate stock ledger shall be the only evidence as to who are stockholders entitled to examine such list or to vote in person or by proxy at such meeting.

2.12 Advance Notice of Stockholder Proposals and Nominations. Unless otherwise determined by the board of directors prior to a meeting of the stockholders, the officer presiding at such meeting, determined in accordance with these by-laws, shall determine the order of business and shall have the authority in his or her discretion to regulate the conduct of such meeting, including, without limitation, to impose restrictions on the persons (other than stockholders of the corporation or their duly appointed proxies) who may attend such meeting, to regulate and restrict the making of statements or asking of questions at such meeting and to cause the removal from such meeting of any person who has disrupted or appears likely to disrupt the proceedings at such meeting.

At a meeting of the stockholders, only such business shall be conducted as shall have been properly brought before the meeting. To be properly brought before any meeting of the stockholders, nominations of directors and the proposals of other business to be conducted must be (a) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the board of directors, (b) otherwise properly brought before the meeting by or at the direction of the board of directors, or (c) properly brought before the meeting by a stockholder who is a stockholder of record at the time of the giving by such stockholder of the notice provided for in this Section 2.12 below, who shall be entitled to vote for such matters at the meeting and who complies with the requirements of this Section 2.12 with respect to any business sought to be brought before the meeting or the nomination of directors. Clause (c) of this paragraph shall be the exclusive means for a stockholder to make nominations or propose other business (other than matters properly brought under Rule 14a-8 under the Securities Exchange Act of 1934, as amended (the "Exchange Act") and included in the Corporation's notice of meeting) before a meeting of the stockholders. In addition, unless the board of directors has determined that directors will be elected at a special meeting of the stockholders, no stockholder may nominate directors for election at any special meeting of the stockholders.

In addition to any other applicable requirements, in order for any proposal or nomination to be properly brought before the meeting by a stockholder (other than a stockholder proposal included in the corporation's proxy statement pursuant to Rule 14a-8 under the Exchange Act) the stockholder must have given timely notice thereof in writing to the secretary of the corporation. To be timely, (a) with respect to an annual meeting of the stockholders held pursuant to Section 2.1 of these by-laws, a stockholder's notice must be received at the principal executive offices of the corporation not less than 60 days nor more than 90 days prior to the anniversary date of the immediately preceding annual meeting of stockholders ; provided, however, in the event that the annual meeting of stockholders is called for a date (including any change

in a date designated by the board of directors pursuant to Section 2.1) more than 60 days prior to such anniversary date, notice by the stockholder to be timely must be so received not later than the close of business on the 10th day following the day on which public disclosure of the date of such meeting was made, and (b) with respect to a special meeting of the stockholders held pursuant to Section 2.2 of these by-laws, a stockholder's notice must be received at the principal executive offices of the corporation by the close of business on the 10th day following the day on which public disclosure of the date of such meeting was made. In no event shall any adjournment or postponement of an annual or special meeting of the stockholders or the announcement thereof commence a new time period for the delivery of such notice by a stockholder.

A stockholder's notice to the secretary shall set forth as to each proposal or nomination the stockholder proposes to bring before the meeting (a) the name and address of the stockholder making such proposal, (b) the class and number of shares of capital stock of the corporation directly or indirectly held of record, owned beneficially and represented by proxy by such stockholder as of the date of such notice by the stockholder, (c) any "derivative security" (as that term is defined in Rule 16a-1(c) under the Exchange Act) directly or indirectly owned beneficially by the stockholder and any other "pecuniary interest" or "indirect pecuniary interest" (as those terms are defined in Rule 16a-1(a)(2) under the Exchange Act) in the shares of capital stock of the corporation, and (d) all other information that would be required to be included in a proxy statement required to be filed with the Securities and Exchange Commission if, with respect to any such proposal or nomination, such stockholder were a participant in a solicitation subject to Regulation 14A under the Exchange Act (the "Proxy Rules").

In addition, if the notice involves a proposal for business, a stockholder's notice to the secretary shall set forth as to each proposal a brief description of the proposal desired to be brought before the meeting, the reasons for making such proposal at the meeting and any material interest that the stockholder has in the proposal. If the notice involves the nomination of a director, a stockholder's notice to the secretary shall set forth (a) as to each person whom the stockholder proposes to nominate for election or re-election as a director, (i) the name, age, business address or residence address of the person, (ii) the principal occupation or employment of the person, (iii) the class and number of shares of capital stock of the corporation, if any, which are beneficially owned by the person, (iv) any other information relating to the nominee as would be required to be included in a proxy statement or other filings required to be filed pursuant to the Proxy Rules (including without limitation the written consent of the nominee to being named in the proxy statement as a nominee and to serve as a director if elected) and (v) a statement signed by the person confirming that, if elected, he or she will comply with the corporation's Global Ethics and Compliance Standards, Policy on Transactions in Securities, Corporate Governance Guidelines and any other applicable rule, regulation, policy or standard of conduct applicable to the directors; and (b) as to the stockholder giving the notice, (i) a representation that the stockholder intends to appear in person or by proxy at the meeting to nominate the person or persons

specified in the notice and (ii) a description of all direct and indirect compensation and other material monetary arrangements, agreements or understandings during the past three years, and any other material relationship, if any, between or concerning the stockholder and its respective affiliates or associates, or others with whom they are acting in concert, on the one hand, and each person nominated by the stockholder, and his or her respective affiliates, associates and others with whom any of them are acting in concert on the other hand. In addition, any person nominated by the stockholder shall complete a questionnaire, in a form available from the corporation upon the request of the stockholder, and such completed questionnaire shall be submitted with the stockholder notice contemplated by this Section 2.12.

If the stockholder holds its shares by or through a nominee, the information required to be provided in a notice of the stockholder contemplated by this Section 2.12 shall be provided about the person who has the power to direct the voting and disposition of the shares of capital stock of the corporation and who has a pecuniary interest in such shares in lieu of the stockholder.

Notwithstanding anything in the by-laws to the contrary, no business pertaining to this Section 2.12 shall be conducted at any meeting except in accordance with the procedures set forth in this Section 2.12. The officer presiding at the meeting shall, if the facts warrant, determine and declare to the meeting that any proposal or nomination, as the case may be, was not properly brought before the meeting in accordance with the provisions of this Section 2.12 and, if the presiding officer should so determine, any proposal not properly brought before the meeting shall not be discussed or voted on and any defective nomination shall be disregarded.

Section 3. BOARD OF DIRECTORS

3.1 Number. The number of directors which shall constitute the whole board shall be not less than three nor more than 17 in number. Within the foregoing limits, the board of directors shall determine the number of directors, and the number of directors may be increased at any time or from time to time by the directors by vote of a majority of the directors then in office. The number of directors may be decreased to any number permitted by the foregoing at any time by the directors by vote of a majority of the directors then in office. The directors shall be classified, with respect to the time for which they severally hold office, into three classes as nearly equal in number as possible: one class whose term expires at the first annual meeting of stockholders after January 21, 1969 (the "Adoption Date"); one class whose term expires at the second annual meeting of stockholders after the Adoption Date; and another class whose term expires at the third annual meeting of stockholders after the Adoption Date, with each such class to hold office until its successors are elected and qualified. At each annual meeting of stockholders after the Adoption Date, the successors of the class of directors whose term expires at that meeting shall be elected

to hold office for a term expiring at the annual meeting of stockholders held in the third year following the year of their election. Directors need not be stockholders.

3.2 Tenure. Except as otherwise provided by law, by the certificate of incorporation or by these by-laws, each director shall hold office until a successor is elected and qualified, or until such director sooner dies, resigns, is removed or replaced.

3.3 Powers. The business and affairs of the corporation shall be managed by or under the direction of the board of directors who shall have and may exercise all the powers of the corporation and do all such lawful acts and things as are not by law, the certificate of incorporation or these by-laws directed or required to be exercised or done by the stockholders.

3.4 Vacancies of Directors. Vacancies and any newly created directorships resulting from any increase in the number of directors may be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director. Any director or directors so chosen shall hold office until the annual meeting of stockholders at which the term of office of the class to which they have been elected expires and until their successors are duly elected and shall qualify, unless they sooner die, resign, or are removed or replaced. The directors shall have and may exercise all their powers notwithstanding the existence of one or more vacancies in their number, subject to any requirements of law or of the certificate of incorporation or of these by-laws as to the number of directors required for a quorum or for any vote or other actions.

3.5 Committees. Subject to Section 3.6 of these by-laws, the board of directors may, by vote of a majority of the whole board, (a) designate, change the membership of or terminate the existence of any committee or committees, each committee to consist of one or more of the directors; (b) designate one or more directors as alternate members of any such committee who may replace any absent or disqualified member at any meeting of the committee; and (c) determine the extent to which each such committee shall have and may exercise the powers of the board of directors in the management of the business and affairs of the corporation, including the power to authorize the seal of the corporation to be affixed to all papers which require it and the power and authority to declare dividends or to authorize the issuance of stock; excepting, however, such powers which by law, by the certificate of incorporation or by these by-laws they are prohibited from so delegating. In the absence or disqualification of any member of such committee and his or her alternate, if any, the member or members thereof present at any meeting and not disqualified from voting, whether or not constituting a quorum, may unanimously appoint another member of the board of directors to act at the meeting in the place of any such absent or disqualified member. Except as the board of directors may otherwise determine, any committee may make rules for the conduct of its business, but unless otherwise provided by the board or such rules, its business shall be conducted as nearly as may be in the same manner as is provided by these by-laws for the conduct of business by the

board of directors. Each committee shall keep regular minutes of its meetings and report the same to the board of directors upon request.

3.6 Executive Committee. The board of directors shall, by vote of a majority of the whole board, elect from its own number an executive committee, to consist of not less than two members in addition to the chief executive officer, and may from time to time designate or alter, within the limits permitted by this Section 3.6, the duties and powers of such committee, or change its membership.

The executive committee shall have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the corporation to the extent permitted by Section 141 of the Delaware General Corporation Law, and may authorize the seal of the corporation to be affixed to all papers which may require it, including the power and authority to declare a dividend, to authorize the issuance of stock and to adopt a certificate of ownership and merger; provided that the executive committee shall not have the power or authority in reference to amending the certificate of incorporation of this corporation (except that the executive committee may, to the extent authorized in the vote or votes providing for the issuance of shares of stock adopted by the board of directors, fix the designations and any of the preferences or rights of such shares or fix the number of shares of any series of stock or authorize the increase or decrease of the shares of any series), adopting an agreement of merger or consolidation, recommending to the stockholders the sale, lease or exchange of all or substantially all of the corporation's property and assets, recommending to the stockholders a dissolution of the corporation or a revocation of a dissolution, amending these by-laws, electing or appointing the chief executive officer, treasurer or secretary or filling vacancies in the board of directors or the executive committee. Each member of the executive committee shall hold office until the first meeting of the board of directors following the next annual meeting of the stockholders and until his or her successor is elected and qualified, or until he or she sooner dies, resigns, is removed, is replaced by change of membership, or becomes disqualified by ceasing to be a director. One-third of the members of the executive committee then in office, but in no case less than two members, shall constitute a quorum for the transaction of business, but any meeting may be adjourned from time to time by a majority of the votes cast upon the question, whether or not a quorum is present, and the meeting may be held as adjourned without further notice.

3.7 Regular Meetings. Regular meetings of the board of directors may be held without call or notice at such places within or without the State of Delaware and at such times as the board may from time to time determine; notice of the first regular meeting following any such determination shall be given to absent directors. A regular meeting of the directors may be held without call or notice immediately after and at the same place as the annual meeting of stockholders.

3.8 Special Meetings. Special meetings of the board of directors may be held at any time and at any place within or without the State of Delaware designated in the

notice of the meeting, when called by the chairman of the board, the vice chairman of the board, the president, or by two or more directors, reasonable notice thereof being given to each director by the secretary or an assistant secretary or by the chairman of the board, the vice chairman of the board, the president or by any one of the directors calling the meeting.

3.9 Notice. It shall be reasonable and sufficient notice to a director to send notice by mail at least 48 hours or by telegram or telecopy at least 24 hours before the meeting addressed to such director at his or her usual or last known business or residence address or to give notice to a director in person or by telephone at least 24 hours before the meeting. Notice of a meeting need not be given to any director if a written waiver of notice, executed by a director before or after the meeting, is filed with the records of the meeting, or to any director who attends the meeting without protesting prior thereto or at its commencement the lack of notice to such director. Neither notice of a meeting nor a waiver of a notice need specify the purposes of the meeting.

3.10 Quorum. Except as may be otherwise provided by law, by the certificate of incorporation or by these by-laws, at any meeting of the directors a majority of the directors then in office shall constitute a quorum, but in no case less than two directors. Any meeting may be adjourned from time to time by a majority of the votes cast upon the question, whether or not a quorum is present, and the meeting may be held as adjourned without further notice.

3.11 Action by Vote. Except as may be otherwise provided by law, by the certificate of incorporation or by these by-laws, when a quorum is present at any meeting the vote of a majority of the directors present shall be the act of the board of directors.

3.12 Action Without a Meeting. Any action required or permitted to be taken at any meeting of the board of directors or a committee thereof may be taken without a meeting if all the members of the board or of such committee, as the case may be, consent thereto in writing, and such writing or writings are filed with the records of the meetings of the board or of such committee. Such consent shall be treated for all purposes as the act of the board or of such committee, as the case may be.

3.13 Participation in Meetings by Conference Telephone. Members of the board of directors, or any committee designated by such board, may participate in a meeting of such board or committee by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other or by any other means permitted by law. Such participation shall constitute presence in person at such meeting.

3.14 Compensation. In the discretion of the board of directors, the directors may be paid their expenses, if any, of attendance at each meeting of the board of

directors and may be paid a fixed sum for attendance at each meeting of the board of directors or a stated salary as director. Nothing contained in this section shall be construed to preclude any director from serving the corporation in any other capacity and receiving compensation therefor. Members of special or standing committees may be allowed like compensation for attending committee meetings.

3.15 Interested Directors and Officers.

(a) No contract or transaction between the corporation and one or more of its directors or officers, or between the corporation and any other corporation, partnership, association, or other organization in which one or more of the corporation's directors or officers are directors or officers, or have a financial interest, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the board or committee thereof which authorizes the contract or transaction, or solely because the vote or votes of such director or officer are counted for such purpose, if:

(1) The material facts as to the relationship or interest of such director or officer and as to the contract or transaction are disclosed or are known to the board of directors or the committee, and the board or committee in good faith authorizes the contract or transaction by the affirmative votes of a majority of the disinterested directors, even though the disinterested directors be less than a quorum; or

(2) The material facts as to the relationship or interest of such director or officer and as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by vote of the stockholders; or

(3) The contract or transaction is fair as to the corporation as of the time it is authorized, approved or ratified, by the board of directors, a committee thereof, or the stockholders.

(b) Common or interested directors may be counted in determining the presence of a quorum at a meeting of the board of directors or of a committee which authorizes the contract or transaction.

Section 4. OFFICERS AND AGENTS

4.1 Enumeration; Qualification. The officers of the corporation shall be a president, a treasurer, a secretary and such other officers, if any, as the board of directors from time to time may in its discretion elect or appoint including without limitation a chairman of the board, a vice chairman of the board, a chief financial officer, one or more other vice presidents, a general counsel and a controller. The corporation may also have such agents, if any, as the board of directors from time to time may in its

discretion choose. Any two or more offices may be held by the same person. Officers may be required by the board of directors to secure the faithful performance of their duties to the corporation by giving bond in such amount and with sureties or otherwise as the board of directors may determine.

4.2 Powers. Subject to law, to the certificate of incorporation and to the other provisions of these by-laws, each officer shall have, in addition to the duties and powers herein set forth, such duties and powers as are commonly incident to his or her office and such additional duties and powers as the board of directors may from time to time designate.

4.3 Election. The officers may be elected by the board of directors at their first meeting following the annual meeting of the stockholders or at any other time. At any time or from time to time the directors may delegate to any officer their power to elect or appoint any other officer or any agents.

4.4 Tenure. Officers shall hold office until the first meeting of the board of directors following the next annual meeting of the stockholders and until their respective successors are chosen and qualified unless a shorter period shall have been specified by the terms of their election or appointment, or in each case until they sooner die, resign, are removed or become disqualified. Agents shall retain their authority at the pleasure of the directors, or the officer by whom they were appointed or by the officer who then holds agent appointive power.

4.5 Chairman of the Board of Directors, Vice Chairman of the Board of Directors, President and Vice President. Unless the board of directors otherwise specifies, the chairman of the board, or if there is none or in the absence or disability of the chairman of the board, the vice chairman of the board, or if there is none or in the absence or disability of the vice chairman of the board, the president shall preside, or designate the person who shall preside, at all meetings of the stockholders, of the board of directors and of the executive committee.

If there is a chairman of the board, unless the board of directors otherwise specifies, the chairman of the board shall be the chief executive officer of the corporation and as such shall have direct charge of all business operations of the corporation and, subject to the control of the directors, shall have general charge and supervision of the business of the corporation.

If there is a vice chairman of the board, the vice chairman of the board shall have such duties and powers as shall be designated from time to time by the board of directors or by the chief executive officer.

The president shall have such duties and powers as shall be designated from time to time by the board of directors or by the chief executive officer.

Any vice presidents shall have such duties and powers as shall be set forth in these by-laws or as shall be designated from time to time by the board of directors or by the chief executive officer, except that no vice president who is not a citizen of the United States shall be authorized to act as the chairman of the board, president or other chief executive officer of the corporation in the absence or disability of the person designated chairman of the board, president or other chief executive officer of the corporation in accordance with this Section 4.5 for so long as the corporation is required by the U.S. maritime laws to be a U.S. citizen by reason of its interest, direct or indirect, in any vessel documented under the laws of the United States of America.

4.6 Chief Financial Officer. The chief financial officer of the corporation shall be responsible for developing, recommending and implementing financial policies of the corporation and have general responsibility for protecting its financial position. The chief financial officer shall represent the corporation with banks and other financial institutions.

4.7 General Counsel and Assistant General Counsels. The general counsel shall be the chief counseling officer of the corporation in all legal matters and, subject to the control by the board of directors, the general counsel shall have charge of all matters of legal import to the corporation. The general counsel's relationship to the corporation shall in all respects be that of an attorney to a client. The general counsel shall have charge of all litigation of the corporation and keep advised of the progress of all legal proceedings and claims by and against the corporation, or in which it is interested by reason of its ownership and control of other corporations. The general counsel shall maintain records of all suits and actions of every nature in which the corporation may be a party, or in which it is interested, with sufficient data to show the nature of the case and the proceedings therein, and such records and the papers relating thereto shall be open at all times to the inspection of the directors and the executive officers of the corporation.

The general counsel shall give to the board of directors and to any officer of the corporation, whenever requested to do so, an opinion upon any question affecting the interests of the corporation and when requested by the chairman of the board, the vice chairman of the board, the president, a vice president, or by the board of directors or the executive committee, shall give an opinion upon any subject that may be referred to the general counsel.

The general counsel may, in his or her discretion, retain such independent attorneys, or law firms, in any and all parts of the world, as the general counsel may deem necessary to assist him or her in the performance of his or her duties and to protect and further the interests of the corporation.

The general counsel shall have power and authority to execute in the name of the corporation any and all bonds or stipulations for costs or other purposes connected with legal proceedings in any of the courts of justice, for the protection or enforcement

of the rights and interest of this corporation; and, by instrument in writing, the general counsel may delegate to any such authority like power and authority to execute such bonds or stipulations.

The assistant general counsel, or, if there are more than one, the assistant general counsels, shall, in the order determined by the general counsel, in the absence or disability of the general counsel perform the duties and exercise the powers of the general counsel and shall perform such other duties and have such other powers as the board of directors and the general counsel may from time to time prescribe.

4.8 Treasurer and Assistant Treasurers. The treasurer shall be in charge of the corporate funds and securities and shall keep, or cause to be kept, full and accurate account of receipts and disbursements in books belonging to the corporation and shall deposit or cause to be deposited all monies and other valuable effects in the name and to the credit of the corporation in such depositories as may be designated by the board of directors. The treasurer shall invest surplus funds in such investments as the treasurer shall deem appropriate and pursuant to this authority may buy and sell securities on behalf of the corporation from time to time. The treasurer shall disburse or cause to be disbursed the funds of the corporation as may be ordered by the board of directors, the chief executive officer, the chief financial officer or such other officer as the chief financial officer may from time to time designate, taking proper vouchers for such disbursements. The treasurer shall be subject to the direction of the chief financial officer.

The assistant treasurer, if any, shall in the absence or disability of the treasurer perform the duties and exercise the powers of the treasurer and shall perform such other duties and have such other powers as the board of directors and the treasurer may from time to time prescribe and shall be subject to the direction of the treasurer.

4.9 Controller and Assistant Controllers. The controller shall be the chief accounting officer of the corporation, shall be in charge of its books of account and accounting records, and shall be in charge of the corporation's accounting policies and procedures. The controller shall be subject to the direction of the chief financial officer. The controller shall, with the approval of the board of directors, arrange for annual audits by independent public accounts.

The assistant controller, if any, shall in the absence or disability of the controller perform the duties and exercise the powers of the controller and shall perform such other duties and have such other powers as the board of directors and the controller may from time to time prescribe and shall be subject to the direction of the controller.

4.10 Secretary and Assistant Secretaries. The secretary shall record all proceedings of the meetings of the stockholders and of the board of directors and its committees in a book or books to be kept for that purpose and shall file therein all actions by written consent of directors. The secretary shall give or cause to be given

notice of all meetings of the stockholders and meetings of the board of directors and shall perform such other duties as may be prescribed by the board of directors or by the chief executive officer. The secretary shall keep in safe custody the seal of the corporation and, when authorized by the board of directors, the chief executive officer, or these by-laws, affix the same to any instrument requiring it and, when so affixed, it shall be attested by the secretary's signature or by the signature of an assistant secretary.

The secretary shall have charge of the stock ledger (which may, however, be kept by any transfer agent or agents of the corporation under the direction of the secretary).

The assistant secretary, or if there are more than one, the assistant secretaries, in the order determined by the secretary, shall in the absence or disability of the secretary perform the duties and exercise the powers of the secretary and shall perform such other duties and have such other powers as the board of directors and the secretary may from time to time prescribe.

Section 5. RESIGNATIONS AND REMOVALS

5.1 Any director or officer may resign at any time by delivering his or her resignation in writing to the chairman of the board, any vice chairman of the board, the president, or the secretary or to a meeting of the board of directors. Such resignation shall be effective upon receipt unless specified to be effective at some other time, and without in either case the necessity of its being accepted unless the resignation shall so state. A director (including persons elected by directors to fill vacancies in the board) may be removed from office with cause by the vote of the holders of a majority of the shares issued and outstanding and entitled to vote in the election of directors. The board of directors may at any time remove any officer either with or without cause. The board of directors may at any time terminate or modify the authority of any agent. Except where a right to receive compensation shall be expressly provided in a duly authorized written agreement with the corporation or severance or other benefit plan or arrangement approved by the board of directors, no director or officer resigning and no director or officer removed shall have any right to any compensation as such director or officer for any period following such director's or officer's resignation or removal, or any right to damages on account of such removal, whether such compensation be by the month or by the year or otherwise; unless, in the case of a resignation, the directors, or, in the case of removal, the body acting on the removal, shall in their or its discretion provide for compensation.

Section 6. VACANCIES OF OFFICERS

6.1 If the office of any officer becomes vacant, the directors may elect a successor by vote of a majority of the directors present and voting at a meeting. Such successors shall hold office for the unexpired term, and until their respective successors

are chosen and qualified or in each case until they sooner die, resign, are removed or become disqualified. Any vacancy of a directorship shall be filled as specified in Section 3.4 of these by-laws.

Section 7. CAPITAL STOCK

7.1 Stock Certificates. The shares of capital stock of the corporation shall be represented by certificates, provided that the board of directors may provide by resolution or resolutions that some or all of any or all classes or series of stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the corporation. Every holder of stock represented by certificates shall be entitled to a certificate stating the number and the class and the designation of the series, if any, of the shares held by him or her, in such form as shall, in conformity to law, the certificate of incorporation and the by-laws, be prescribed from time to time by the board of directors. Such certificate shall be signed by the chairman or vice chairman of the board, if any, or the president or a vice president and by the treasurer or an assistant treasurer or by the secretary or an assistant secretary. Any of or all the signatures on the certificate may be a facsimile. In case an officer, transfer agent, or registrar who has signed or whose facsimile signature has been placed on such certificate shall have ceased to be such officer, transfer agent, or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he or she were such officer, transfer agent, or registrar at the time of its issue.

7.2 Loss of Certificates. In the case of the alleged theft, loss, destruction or mutilation of a certificate of stock, a duplicate certificate may be issued in place thereof, upon such terms, including receipt of a bond sufficient to indemnify the corporation against any claim on account thereof, as the board of directors may prescribe.

Section 8. TRANSFER OF SHARES OF STOCK

8.1 Transfer on Books. Subject to the restrictions, if any, stated or noted on the stock certificate, or otherwise in force, shares of stock may be transferred on the books of the corporation by the surrender to the corporation or its transfer agent of the certificate therefor properly endorsed or accompanied by a written assignment and power of attorney properly executed, with necessary transfer stamps affixed, and with such proof of the authenticity of signature as the board of directors or the transfer agent of the corporation may reasonably require. Uncertificated shares of stock may be transferred on the books of the corporation upon receipt of proper transfer instructions from the registered owner of the uncertificated shares, an instruction from an approved source duly authorized by such owner or from an attorney lawfully constituted. Except as may be otherwise required by law, by the certificate of incorporation or by these by-laws, the corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends

and the right to receive notice and to vote or to give any consent with respect thereto and to be held liable for such calls and assessments, if any, as may lawfully be made thereon, regardless of any transfer, pledge or other disposition of such stock until the shares have been properly transferred on the books of the corporation.

8.2 Record Date and Closing Transfer Books. In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the board of directors may fix a record date, which record date shall not precede the date upon which the vote fixing the record date is adopted by the board of directors, and which record date shall not be more than 60 days nor less than ten days before the date of such meeting. If no such record date is fixed by the board of directors, the record date for determining the stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the board of directors may fix a new record date for the adjourned meeting.

In order that the corporation may determine the stockholders entitled to receive payment of any dividend declared pursuant to Section 9 of these by-laws or other distribution or allotment of any rights or to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the board of directors may fix a record date, which record date shall not precede the date upon which the vote fixing the record date is adopted, and which record date shall be not more than 60 days prior to such payment, exercise or other action. If no such record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the board of directors adopts the vote relating thereto.

Section 9. DIVIDENDS

9.1 Dividends upon the capital stock of the corporation, subject to the provisions of the certificate of incorporation, if any, may be declared by the board of directors at any regular or special meeting, pursuant to law. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the certificate of incorporation.

Section 10. CONTRIBUTIONS

10.1 The directors of this corporation are authorized to make charitable contributions as defined in the United States Internal Revenue Code, as from time to time amended, in such amounts as the directors may determine to be reasonable.

Section 11. CORPORATE SEAL

11.1 Subject to alteration by the directors, the seal of the corporation shall consist of a flat-faced circular die with the word "Delaware" and the name of the corporation cut or engraved thereon, together with such other words, dates or images as may be approved from time to time by the directors. The corporate seal of the corporation may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

Section 12. EXECUTION OF PAPERS

12.1 Except as the board of directors may generally or in particular cases authorize the execution thereof in some other manner, all deeds, leases, transfers, sales of securities, contracts, proxies, bonds, notes, checks, drafts and other obligations, agreements and undertakings made, accepted or endorsed by the corporation shall be signed by the chairman of the board, the vice chairman of the board, the president, any vice president or the treasurer, and, if such papers require a seal, the seal of the corporation shall be affixed thereto and attested by the secretary or an assistant secretary.

Section 13. FISCAL YEAR

13.1 Except as from time to time otherwise provided by the board of directors, the fiscal year of the corporation shall commence on the first day of October of each year.

Section 14. INDEMNIFICATION

14.1 The corporation shall, to the maximum extent permitted from time to time under the law of the State of Delaware, indemnify and upon request shall advance expenses to any person who is or was a party or is threatened to be made a party to any threatened, pending or completed action, suit, proceeding, claim or counterclaim, whether civil, criminal, administrative or investigative, by reason of the fact that such person is or was or has agreed to be a director, officer, employee or agent of this corporation or while a director, officer, employee or agent is or was serving at the request of this corporation as a director, officer, partner, trustee, fiduciary, employee or agent of any corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, against expenses (including attorney's fees and expenses), judgments, fines, penalties and amounts paid in settlement or incurred in connection with the investigation, preparation to defend or defense of such action, suit, proceeding, claim or counterclaim; provided, however, that the foregoing shall not require this corporation to indemnify or advance expenses to any person in connection with any action, suit, proceeding, claim or counterclaim initiated by or on behalf of such person, other than an action to enforce indemnification rights. Such indemnification shall not be exclusive of other indemnification rights arising under any

agreement, vote of directors or stockholders or otherwise and shall inure to the benefit of the heirs and legal representatives of such person. Any such person seeking indemnification under this Section 14.1 shall be deemed to have met the standard of conduct required for such indemnification unless the contrary shall be established. The corporation shall have the power to provide indemnification and advance expenses to any other person, including stockholders purporting to act on behalf of the corporation, to the extent permitted by the law of the State of Delaware.

Section 15. AMENDMENTS

15.1 These by-laws may be altered, amended or repealed by (i) the affirmative vote of the holders of at least 75 percent of the voting power of the then outstanding shares of stock of all classes and series of this corporation entitled to vote generally in the election of directors, voting together as a single class or (ii) a vote of the majority of the directors then in office at any annual, regular or special stockholders or directors meeting, called for that purpose, the notice of which shall specify the subject matter of the proposed new by-law or the alteration, amendment or repeal of an existing by-law or the articles to be affected thereby. Any by-law, whether made, altered, amended or repealed by the stockholders or directors, may be repealed, amended, further amended or reinstated, as the case may be, by either the stockholders or the directors as aforesaid.

Section 16. EXCLUSIVE FORUM

16.1 Exclusive Forum. Unless the Corporation consents in writing to the selection of an alternative forum, the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director or officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim against the Corporation or any director or officer or other employee of the Corporation arising pursuant to any provision of the Delaware General Corporation Law or the Corporation's Certificate of Incorporation or Bylaws (as either may be amended from time to time), or (iv) any action asserting a claim against the Corporation or any director or officer or other employee of the Corporation governed by the internal affairs doctrine shall be a state court located within the State of Delaware (or, if no state court located within the State of Delaware has jurisdiction, the federal district court for the District of Delaware), in all cases subject to the court's having personal jurisdiction over the indispensable parties named as defendants. Any person or entity purchasing or otherwise acquiring any interest in the shares of capital stock of the Corporation will be deemed to have notice of and consented to the provisions of this Section 16.

16.2 Foreign Actions. If any Foreign Action (as defined below) is filed in the name of any stockholder, such stockholder will be deemed to have consented to (i) the personal jurisdiction of the state and federal courts located within the State of Delaware in connection with any action brought in any such court to enforce Section 16.1 above

(an "FSC Enforcement Action") and (ii) having service of process made upon such stockholder in any such FSC Enforcement Action by service upon such stockholder's counsel in the Foreign Action as agent for such stockholder. A "Foreign Action" means any action the subject matter of which is within the scope of Section 16.1 that is filed in a court other than a court located within the State of Delaware.