

AVX CORPORATION
Incorporated under the laws
of the State of Delaware

BY-LAWS

AS AMENDED AND RESTATED December 21, 2007

BY-LAWS
of
AVX CORPORATION

ARTICLE I

Offices

SECTION 1. Registered Office. The registered office of the Corporation in the State of Delaware shall be in the City of Wilmington, County of New Castle, and the resident agent in charge thereof shall be The Corporation Trust Company.

SECTION 2. Other Offices. The Corporation may have offices at such other place or places as from time to time the Board of Directors may determine or the business of the Corporation may require.

ARTICLE II

Meetings of Stockholders

SECTION 1. Annual Meetings. The annual meeting of the stockholders for the election of directors and for the transaction of such other business as may come before the meeting shall be held at such time as may be specified by resolution of the Board of Directors.

SECTION 2. Special Meetings. A special meeting of the stockholders for any purpose or purposes, unless otherwise prescribed by statute, may be called at any time by the Chairman of the Board or by order of the Board of Directors and shall be called by the Chairman of the Board or Secretary upon the request in writing of a stockholder or stockholders holding of record at least one-half of the outstanding shares of stock of the Corporation entitled to vote at such meeting.

SECTION 3. Place of Meetings. Each meeting of stockholders of the Corporation shall be held at such place, within or outside the State of Delaware, and at such hour as shall be fixed by the Board of Directors and specified in the notice or waiver of notice of said meeting.

SECTION 4. Notice of Meetings. Except as otherwise provided by law, notice of each meeting of the stockholders shall be given to each stockholder of record entitled to vote at such meeting, whether annual or special, not less than ten nor more than sixty days before the day on which the meeting is to be held, by delivering notice thereof to the stockholder by any manner permitted by law. Except where expressly required by law, no

publication of any notice of a meeting of stockholders shall be required. Notice of any meeting of stockholders shall not be required to be given to any stockholder who shall attend such meeting in person or by proxy or who shall in person or by attorney thereunto authorized, waive such notice in writing, either before or after such meeting. Notice of any adjourned meeting of the stockholders shall not be required to be given, except where expressly required by law.

SECTION 5. Quorum. At each meeting of the stockholders, except where other provision is made by law, the holders of a majority of the issued and outstanding stock of the Corporation entitled to vote at such meeting shall constitute a quorum for the transaction of business. In the absence of a quorum, a majority in interest of the stockholders of the Corporation present in person or by proxy and entitled to vote, or, in the absence of all the stockholders entitled to vote, any officer entitled to preside at, or act as Secretary of, such meeting, shall have the power to adjourn the meeting from time to time, until stockholders holding the requisite amount of stock shall be present or represented. At any such adjourned meeting at which a quorum shall be present, any business may be transacted which might have been transacted at the meeting as originally called.

SECTION 6. Voting. Each stockholder shall, subject to the provisions of the Certificate of Incorporation, at each meeting of the stockholders, be entitled to one vote in person or by proxy for each share of the stock of the Corporation which has voting power on the matter in question and which shall have been held by the stockholder and registered in the stockholder's name on the books of the Corporation:

(a) on the date fixed pursuant to the provisions of Section 4 of Article VII of these By-laws as the record date for the determination of stockholders who shall be entitled to notice of and to vote at such meeting, or

(b) if no such record date shall have been so fixed, then (i) at the close of business on the date next preceding the date on which notice of the meeting shall be given, or (ii) if notice of the meeting shall be waived, at the close of business on the date next preceding the day on which the meeting shall be held.

Any vote on stock of the Corporation may be given by the stockholder entitled thereto in person or by proxy; provided, however, that no proxy shall be voted on after three years from its date unless said proxy provides for a longer period. At all meetings of the stockholders, all matters (except where other provision is made by law or by the Certificate of Incorporation of the Corporation) shall be decided by a majority of the votes cast by the holders of the stock present in person or by proxy and entitled to vote thereat, a quorum being present.

SECTION 7. List of Stockholders. It shall be the duty of the Secretary or other officer of the Corporation who shall have charge of its stock ledger, either directly or through another designated officer of the Corporation or through a transfer agent or transfer clerk appointed by the Board of Directors, to prepare and make, at least ten days before every meeting of the stockholders for the election of directors of the Corporation,

a complete list of the stockholders entitled to vote thereat, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for a period of at least ten days prior to the election, at the principal place of business of the Corporation during ordinary business hours, or on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting. The list shall be produced and kept at the time and place of said meeting during the whole time thereof and subject to the inspection of any stockholder who shall be present thereat. Upon the willful neglect or refusal of the directors to produce such list at any election, they shall be ineligible for election to any office at such election. The original or duplicate stock ledger shall be the only evidence as to who are the stockholders entitled to examine such list or the books of the Corporation, or to vote in person or by proxy at such election.

SECTION 8. Consent of Stockholders in Lieu of Meeting. Anything in these By-laws to the contrary notwithstanding, any action required by the General Corporation Law of the State of Delaware to be, or which may be, taken at any annual or special meeting of the stockholders may be taken without a meeting, without prior notice and without a vote, if a consent in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. In connection with any such action without a meeting by consent in writing, (i) notice of the proposal to take such action shall be given, as provided in Section 4 of this Article II, to each stockholder of record of the Corporation who would be entitled to notice if such action were to be taken at a meeting; (ii) such action shall be deemed to have been taken upon receipt by the Corporation of the requisite consents or, if so specified in the notice, upon the later of a specified date or receipt of the requisite consents; and (iii) the record of stockholders provided for in Section 1 of Article VII shall be opened to the examination of any stockholder, for purposes germane to such action to be taken, during ordinary business hours, from the time of giving notice of the proposal until the action shall have been taken. Prompt notice of the taking of the corporate action without a meeting by less than a unanimous written consent shall be given to those stockholders who have not consented in writing.

SECTION 9. Advance Notice of Stockholder Business. At an annual meeting of the stockholders, only such business shall be conducted as shall have been properly brought before the meeting. To be properly brought before an annual meeting business 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) otherwise properly brought before the meeting by a stockholder. For business to be properly brought before an annual meeting by a stockholder, including proposals for nomination of directors, the stockholder must have given timely notice thereof in writing to the Secretary of the Corporation. To be timely, a stockholder's notice must be delivered to or mailed and received at the principal offices of the Corporation, not less than sixty days nor more than ninety days prior to the meeting; provided, however, that in the event that less than

seventy days' notice or prior public disclosure of the date of the meeting is given or made to stockholders, notice by the stockholder to be timely must be so received not later than the close of business on the tenth day following the day on which such notice of the date of the meeting was mailed or such public disclosure was made. A stockholder's notice to the Secretary shall set forth as to each matter the stockholder proposes to bring before the annual meeting (a) a brief description of the business desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (b) any material interest of the stockholder in such business, (c) the name and address, as they appear on the Corporation's books, of the stockholder proposing such business, (d) the class and number of shares of the Corporation which are beneficially owned by such stockholder and (e) with respect to notice of an intent to make a nomination, a description of all arrangements or understandings among the stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nomination or nominations are to be made by the stockholder and all information regarding each nominee that would be required to be disclosed in solicitations of proxies for election of directors in an election contest pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Notice of intent to make a nomination shall be accompanied by the written consent of each nominee to serve as director of the Corporation if so elected. Notwithstanding anything in the By-Laws to the contrary, no business shall be conducted at any annual meeting except in accordance with the procedures set forth in this Section 9. The Chairman of the annual meeting shall, if the facts warrant, determine and declare to the meeting that business was not properly brought before the meeting and in accordance with the provisions of this Section 9, and if the Chairman should so determine, the Chairman shall so declare to the meeting and any such business not properly brought before the meeting shall not be transacted. Business transacted at any special meeting of the stockholders shall be limited to the purposes stated in the notice of such special meeting.

ARTICLE III

Board of Directors

SECTION 1. General Powers. The property, affairs and business of the Corporation shall be managed by the Board of Directors.

SECTION 2. Number, Election, Qualification and Term of Office. The number of directors shall be as fixed from time to time by resolution of the Board of Directors or of the stockholders but in no case shall the number be less than three. Beginning on July 16, 1998, the Board of Directors shall be divided into three classes of numbers as equal as possible. The term of office of one of such classes shall expire each year. At each annual meeting of shareholders, there shall be elected (i) the directors of the class the term of office of which shall then expire; (ii) directors to fill any vacancies in any other class; (iii) directors to succeed any directors who shall have been elected to fill vacancies in any other class since the next preceding annual meeting; and (iv) directors to be added to a

respective class as a result of an increase in the number of directors. Directors to be elected as provided in clauses (ii) and (iii) shall be elected for the unexpired portions of the original terms of the respective classes. Directors to be elected as provided in clause (iv) shall be elected to the class recommended by the Board of Directors. Except as otherwise provided in the Certificate of Incorporation or in these By-laws, directors shall be elected by a plurality of the votes of the stockholders entitled to vote at each meeting of stockholders for the election of a director or directors. At any meeting of shareholders where directors of more than one class are to be elected, the directors of the class or classes being elected for the shortest terms shall be elected first.

Election of directors need not be by ballot. Directors need not be stockholders. Each director shall hold office until a successor shall have been duly elected and qualified, or until death, or until the director shall resign, or until such director shall have been removed in the manner hereinafter provided.

SECTION 3. Resignation. Any director of the Corporation may resign at any time by giving written notice to the Chairman of the Board or to the Secretary of the Corporation. The resignation of any director shall take effect at the time specified therein; and, unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

SECTION 4. Vacancies. Any vacancy in the Board of Directors caused by death, resignation, disqualification, removal, an increase in the number of directors, or any other cause, may be filled by a majority of the remaining directors (though less than a quorum), or by a majority of the stockholders at a special meeting of the stockholders called for such purpose and each director so chosen shall hold office until the next annual election and until a successor shall be duly elected and qualified, unless sooner displaced.

SECTION 5. Place of Meetings. Except as otherwise specifically provided by law, the Board of Directors may hold its meetings, have one or more offices, and keep the books and records of the Corporation, at such place or places within or without the State of Delaware, as the Board may from time to time determine.

SECTION 6. Annual Organizational Meeting. After each annual election of directors and on the same day, the Board of Directors shall meet for the purpose of organization, the election of officers and the transaction of other business at the place where regular meetings of the Board of Directors are held. Notice of such meeting need not be given. Such meeting may be held at any other time or place which shall be specified in a notice given as hereinafter provided for special meetings of the Board of Directors or in a consent and waiver of notice thereof signed by all the directors.

SECTION 7. Regular Meetings. Regular meetings of the Board of Directors may be held at such places and at such times as the Board shall determine. If any day fixed for a regular meeting shall be a legal holiday at the place where the meeting is to be held, then the meeting which would otherwise be held on that day shall be held at such place at the same hour and on the next succeeding business day not a legal holiday. Notice of regular meetings need not be given.

SECTION 8. Special Meetings; Notice. A special meeting of the Board of Directors shall be held whenever called by the Chairman of the Board or by two of the directors. Notice of each such meeting shall be delivered to each director, by any manner permitted by law, at least seven calendar days before the day on which the meeting is to be held. Each such notice shall state the time and place of the meeting but need not state the purposes thereof, except as otherwise herein expressly provided. Notice of any meeting of the Board need not be given to any director if waived by such director in writing, whether before or after such meeting shall be held.

SECTION 9. Quorum and Manner of Acting. Except as otherwise provided by statute or by these By-laws, a majority of the total number of directors (but not less than two) shall be required to constitute a quorum for the transaction of business at any meeting, and the act of a majority of the directors present at any meeting at which a quorum shall be present shall be the act of the Board of Directors. In the absence of a quorum, a majority of the directors present may adjourn any meeting from time to time until a quorum be had. Notice of any adjourned meeting need not be given. The Directors shall act only as a board and the individual Directors shall have no power as such.

SECTION 10. Telecommunication Meetings. Members of the Board of Directors, or any committee designated by the Board, may participate in a meeting of the Board or such committee by means of conference telephone or other telecommunications equipment in which all persons so participating can hear each other, and such participation constitutes presence of such Director in person at such meeting for purposes of Section 9 of this Article III.

SECTION 11. Remuneration. In addition to reimbursement of the reasonable expenses incurred in attending meetings or otherwise in connection with attention to the affairs of the Corporation, each director as such, and as a member of any committee of the Board of Directors shall be entitled to receive such remuneration as may be fixed from time to time by the Board of Directors, no such payments shall preclude any director from serving the Corporation in any other capacity and receiving remuneration therefor.

SECTION 12. Action by Consent. Unless otherwise restricted by the Certificate of Incorporation or these By-laws, any action required or permitted to be taken at any meeting of the Board of Directors, or of any committee thereof, may be taken without a meeting, if prior to such action a written consent thereto is signed by all members of the Board or of such committee, as the case may be, and such written consent is filed with the minutes of proceedings of the Board or Committee.

ARTICLE IV

Executive and Other Committees

SECTION 1. Executive Committee. The Board of Directors, by resolution adopted by a majority of the whole Board, may designate not less than four of the directors then in office to constitute an Executive Committee, each member of which unless otherwise determined by resolution adopted by a majority of the whole Board, shall continue to be a member of such Committee until the annual meeting of the stockholders which shall be held next after designation as a member of such Committee or until the earlier termination as a director. The Chief Executive Officer shall always be designated as a member of the Executive Committee. The Board may by resolution appoint one member as the Chairman of the Executive Committee who shall preside at all meetings of such Committee. In the absence of said Chairman, the Chief Executive Officer shall preside at all such meetings. In the absence of both the Chairman of the Executive Committee and the Chief Executive Officer, a majority of the members of the Executive Committee present shall choose a chairman to preside at such meetings. Any person appointed by the Chairman, shall act as secretary of the meeting and keep the minutes thereof.

SECTION 2. Powers of the Executive Committee. To the extent permitted by law, the Executive Committee may exercise all the powers of the Board in the management of specified matters where such authority is delegated to it by the Board, and also, to the extent permitted by law, the Executive Committee shall have, and may exercise, all the powers of the Board in the management of the business and affairs of the Corporation, including, if such Committee is so empowered and authorized by resolution adopted by a majority of the entire Board, the power and authority to declare a dividend and to authorize the issuance of stock, and may authorize the seal of the Corporation to be affixed to all papers which may require it, except that the Executive Committee shall not have such power or authority to amend the Certificate of Incorporation or these By-laws, to adopt an agreement of merger or consolidation, to recommend to the stockholders the sale, lease or exchange of all or substantially all of the property and assets of the Corporation, or to recommend to the stockholders a dissolution of the Corporation or a revocation of a dissolution. An act of the Executive Committee taken within the scope of its authority shall be an act of the Board. The Executive Committee shall render in the form of minutes a report of its several acts at each regular meeting of the Board and at any other time when so directed by the Board.

SECTION 3. Meetings of the Executive Committee. Regular meetings of the Executive Committee shall be held at such times, on such dates and at such places as shall be fixed by resolution adopted by a majority of the Executive Committee, of which regular meetings notice need not be given, or as shall be fixed by the Chairman of the Executive Committee or in the absence of the Chairman of the Executive Committee the Chief Executive Officer and specified in the notice of such meeting. Special meetings of the Executive Committee may be called by the Chairman of the Executive Committee or by the Chief Executive Officer. Notice of each such special meeting of the Executive Committee (and of each regular meeting for which notice shall be required), stating the time and place thereof shall be mailed (by airmail if not within 100 miles of the place of

mailing) to each member of the Executive Committee at least ten calendar days before the day on which such meeting is to be held, or shall be sent by facsimile transmission or comparable medium, or be delivered personally or by telephone, at least seven calendar days before the time at which such meeting is to be held; but notice need not be given to a member of the Executive Committee who shall waive notice in writing, whether before or after such meeting shall be held.

SECTION 4. Quorum and Manner of Acting of the Executive Committee. Four members of the Executive Committee shall constitute a quorum for the transaction of business, and the act of a majority of the members of the Executive Committee present at a meeting at which a quorum shall be present shall be the act of the Executive Committee. In the absence or disqualification of a member of the Executive Committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not the member or members constitute 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. The members of the Executive Committee shall act only as a committee and individual members shall have no power as such.

SECTION 5. Other Committees. The Board of Directors may, by resolution adopted by a majority of the Board, designate members of the Board to constitute other committees, which shall have, and may exercise, such powers as the Board may by resolution delegate to them, and shall in each case consist of such number of directors as the Board may determine; provided, however, that each such committee shall have at least three directors as members thereof. Such a committee may either be constituted for a specified term or may be constituted as a standing committee which does not require annual or periodic reconstitution. A majority of all the members of any such committee may determine its action and its quorum requirements and may fix the time and place of its meetings, unless the Board shall otherwise provide.

SECTION 6. Changes in Committees; Resignations; Removals; Vacancies. The Board of Directors shall have power, by resolution adopted by a majority of the Board, at any time to change or remove the members of, to fill vacancies in, and to discharge any committee created pursuant to these By-laws, either with or without cause. Any member of any such committee may resign at any time by giving written notice to the Board, the Chairman of the Board or the Secretary. Such resignation shall take effect upon receipt of such notice or at any later time specified therein; and, unless otherwise specified therein, acceptance of such resignation shall not be necessary to make it effective. Any vacancy in any committee, whether arising from death, resignation, and increase in the number of committee members or any other cause, shall be filled by the Board of Directors in the manner prescribed in these By-laws for the original appointment of the members of such committee.

ARTICLE V

Officers

SECTION 1. Number. The Officers of the Corporation shall be a Chief Executive Officer, a President, one or more Vice Presidents (one or more of whom may be designated Executive or Senior Vice Presidents), a Secretary, a Treasurer, and, if the Board shall so elect, such other officers and agents as may be appointed by the Board of Directors pursuant to Section 3 of this Article V. Any two or more offices may be held by the same person.

SECTION 2. Election, Term of Office and Qualifications. The officers shall be elected annually by the Board of Directors, and except in the case of officers appointed in accordance with the provisions of Section 3 of this Article V, each shall hold office until the next annual election of officers and until a successor shall have been duly elected and qualified, or until death, or until the officer shall resign, or until the officer shall have been removed in the manner hereinafter provided.

SECTION 3. Other Officers. The Corporation may have such other officers and agents as may be deemed necessary by the Board of Directors. Such other officers and agents shall be appointed in such manner, have such duties and hold their offices for such terms as may be determined by the Board of Directors. The Board may delegate to any principal officer the power to appoint or remove any such other officers or agents.

SECTION 4. Resignations. Any officer may resign at any time by giving written notice of such resignation to the Board of Directors, to the Chief Executive Officer or to the Secretary of the Corporation. Any such resignation shall take effect at the time of acceptance by the Corporation.

SECTION 5. Removal. Any officer may be removed, either with or without cause, by a vote of a majority of the whole Board of Directors at a special meeting called for the purpose.

SECTION 6. Vacancies. A vacancy in any office because of death, resignation, removal or any other cause shall be filled for the unexpired portion of the term in the manner prescribed in these By-laws for election or appointment to such office.

SECTION 7. The Chief Executive Officer. The Chief Executive Officer of the Corporation shall have, subject to the direction of the Board, general and active supervision over the business and affairs of the Corporation and over its several officers. The Chief Executive Officer shall perform such duties and may exercise such power as from time to time may be assigned by these By-laws or the Board of Directors. In the absence or disability of the Chairman of the Board, the powers of the Chairman of the Board may be exercised by the Chief Executive Officer

SECTION 8. The President and Vice Presidents. The President or any Vice President shall perform such duties and may exercise such powers as from time to time may be assigned by these By-laws, the Board of Directors or the Chief Executive Officer.

SECTION 9. The Secretary and the Assistant Secretaries. The Secretary shall record or cause to be recorded in books provided for the purpose the minutes of the meetings of the stockholders, the Board of Directors and all committees, if any; shall see that all notices are duly given in accordance with the provisions of these By-laws and as required by law; shall be custodian of all corporate records (other than financial) and of the seal of the Corporation and see that the seal is affixed to all documents the execution of which on behalf of the Corporation under its seal is duly authorized in accordance with the provisions of these By-laws; shall keep the record of stockholders as required by Article VII of these By-laws, which shall include the post office address of each stockholder, and make all proper changes therein, retaining the documents relied upon for all such changes; shall see that the books, reports, statements, certificates and all other documents and records required by law are properly kept and filed; and, in general, shall perform all duties incident to the office of Secretary and such other duties as may, from time to time, be assigned by the Board of Directors or by the Chief Executive Officer.

At the request of the Secretary, or in the absence of the Secretary, any Assistant Secretary shall perform any of the duties of the Secretary and, when so acting, shall have all the powers of, and be subject to all the restrictions upon, the Secretary. Except where by law the signature of the Secretary is required, each of the Assistant Secretaries shall possess the same power as the Secretary to sign certificates, contracts, obligations and other instruments of the Corporation, and to affix the seal of the Corporation to such instruments, and attest the same.

SECTION 10. The Treasurer and the Assistant Treasurers. The Treasurer shall have charge and custody of, and be responsible for, all funds and securities of the Corporation, and shall deposit all such funds in the name of the Corporation in such banks, trust companies or other depositories as shall be selected in accordance with the provisions of these By-laws; shall render to the Board of Directors, whenever the Board may so require, and shall present at the annual meeting of the stockholders, if called upon so to do, a report of all transactions as Treasurer; and, in general, shall perform all duties incident to the office of Treasurer and such other duties as may, from time to time, be assigned by the Board of Directors or by the Chief Executive Officer.

At the request of the Treasurer, or in the absence of the Treasurer, the Assistant Treasurer, or in case there shall be more than one Assistant Treasurer, the Assistant Treasurer designated by the Board of Directors or by the Chief Executive Officer shall perform any of the duties of the Treasurer and, when so acting, shall have all the powers of, and be subject to all the restrictions upon, the Treasurer. Except where by law the signature of the Treasurer is required, each of the Assistant Treasurers shall possess the same power as the Treasurer to sign all certificates, contracts, obligations and other instruments of the Corporation.

SECTION 11. Salaries. The salaries of the officers shall be fixed from time to time by the Board of Directors or a committee thereof. No officer shall be prevented from receiving such salary by reason of the fact that the officer is also a director of the Corporation.

ARTICLE VI

Contracts, Checks, Loans and Deposits

SECTION 1. Contracts, Checks, etc. All contracts and agreements authorized by the Board of Directors and all checks, drafts, bills of exchange or other orders for the payment of money, notes, or other evidences of indebtedness issued in the name of the Corporation, shall be signed by such officer or officers, or agent or agents, as may from time to time be designated by the Board of Directors, which designation may be general or confined to specific instances.

SECTION 2. Proxies in Respect of Securities of Other Corporations. Unless otherwise provided by resolution adopted by the Board of Directors, the Chief Executive Officer, the President or a Vice President may from time to time appoint an attorney or attorneys, or an agent or agents, to exercise in the name and on behalf of the Corporation the powers and rights which the Corporation may have as the holder of stock or other securities in any other corporation to vote or to consent in respect of such stock or other securities; the Chief Executive Officer, the President or any Vice President may instruct the person or persons so appointed as to the manner of exercising such powers and rights and the Chief Executive Officer, the President or any Vice President may execute or cause to be executed in the name and on behalf of the Corporation and under its corporate seal, or otherwise, all such written proxies, powers of attorney or other written instruments as such officer may deem necessary in order that the Corporation may exercise such powers and rights.

ARTICLE VII

Certificates of Stock, Books and Records

SECTION 1. Certificates for Stock. Shares of capital stock of the Corporation may be certificated or uncertificated and shall be entered in the books of the Corporation and registered as they are issued. Any certificates representing shares of stock shall be in such form as the Board shall prescribe, certifying the number, class and series, if any, of shares of stock of the Corporation owned by the stockholder. Any certificates issued to any stockholder shall be numbered in the order in which they are issued and shall be signed in the name of the Corporation by the person who was at the time of signing the Chief Executive Officer, the President or a Vice President and by the person who was at the time of signing the Secretary or an Assistant Secretary, and the seal of the Corporation shall be affixed thereto; provided, however, that if any such certificate is countersigned by a transfer agent other than the Corporation or its employee, or, (b) by a registrar other than the Corporation or its employee, the signatures thereon of such Chief Executive Officer, President or Vice President and of such Secretary or Assistant Secretary and the seal of the Corporation affixed thereto may be facsimiles. In case any officer or the officers of the Corporation who shall have signed, or whose facsimile signature or signatures shall have been placed upon, any such certificate or certificates

shall cease to be such officer or officers before such certificate or certificates shall have been issued, such certificate or certificates may nevertheless be issued by the Corporation with the same effect as though the person or persons who signed such certificate or certificates or whose facsimile signature or signatures shall have been placed thereof were such officer or officers at the date of issuance.

SECTION 2. Transfers of Stock. Upon surrender to the Corporation or the transfer agent of the Corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignation, or authority to transfer, it shall be the duty of the Corporation to issue a new certificate or evidence of the issuance of uncertificated shares to the stockholder entitled thereto, cancel the old certificate and record the transaction upon the Corporation's books. Upon the surrender of any certificate for transfer of stock, such certificate shall at once be conspicuously marked on its face "Cancelled" and filed with the permanent records of the Corporation. Upon the receipt of proper transfer instructions from the registered owner of uncertificated shares, such uncertificated shares shall be cancelled, issuance of new equivalent uncertificated shares or certificated shares shall be made to the stockholder entitled thereto and the transaction shall be recorded upon the books of the Corporation. If the Corporation has a transfer agent or registrar acting on its behalf, the signature of any officer or representative may be a facsimile. The person in whose name shares of stock stand on the books of the Corporation shall be deemed the owner thereof for all purposes as regards the Corporation. Whenever any transfer of shares shall be made for collateral security, and not absolutely, such fact shall be so expressed in the entry of transfer if both the transferor and the transferee request the Corporation to do so.

SECTION 3. Regulations. The Board may make such rules and regulations as it may deem expedient, not inconsistent with these By-laws, concerning the issue, transfer and registration of certificated or uncertificated stock of the Corporation. The Board may appoint or authorize any officer or officers to appoint one or more transfer clerks or one or more transfer agents and one or more registrars and may require any certificates for stock to bear the signature or signatures of any of them.

SECTION 4. Fixing Date for Determination of Stockholders of Record. 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, or to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any other change, conversion or exchange of stock of for the purpose of any other lawful action, the Board may fix, in advance, a record date, which shall not be more than sixty nor less than 10 days before the date of such meeting, nor more than 60 days prior to any other action. If in any case involving the determination of stockholders for any purpose other than (i) notice of or voting at a meeting of stockholders or (ii) expressing consent to corporate action in writing without a meeting, the Board shall not fix such a record date, the record date for determining stockholders for such purpose shall be the close of business on the day on which the Board shall adopt the resolution relating thereto. A determination of stockholders 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 may fix a new record date for the adjourned meeting.

SECTION 5. Lost Certificates. Any person claiming a certificate of stock to be lost or destroyed shall make an affidavit or affirmation of that fact and advertise the same in such manner as the Board of Directors may require, and shall if the directors so require give the Corporation a bond of indemnity, in form and with one or more sureties satisfactory to the Board, in at least double the value of the stock represented by said certificate, whereupon the Corporation may issue (i) a new certificate or certificates of stock, or (ii) uncertificated shares in place of any certificate or certificates previously issued by the Corporation alleged to be lost or destroyed.

SECTION 6. Books and Records. The books and records of the Corporation may be kept at such places within or without the State of Delaware as the Board of Directors may from time to time determine.

ARTICLE VIII

Dividends

Dividends upon the capital stock of the Corporation when earned may be declared by the Board of Directors at any regular or special meeting.

Before payment of any dividend or making any distribution of profits, there may be set aside out of the surplus or net profits of the Corporation such sum or sums as the directors from time to time, in their absolute discretion, think proper as a reserve fund to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the Corporation, or for such other purpose as the directors shall think conducive to the interests of the Corporation.

ARTICLE IX

Seal

The corporate seal shall be in the form of a circle and shall bear the name of the Corporation, the year in which the Corporation was incorporated and the words "CORPORATE SEAL-DELAWARE".

ARTICLE X

Fiscal Year

The fiscal year of the Corporation shall end on March 31 in each year, unless otherwise fixed by the Board of Directors.

ARTICLE XI

Indemnification

SECTION 1. Indemnification. (a) The Corporation shall to the fullest extent permitted by applicable law as then in effect indemnify any person who is or was a director or officer of the Corporation (the "Indemnatee") who was or is involved in any manner (including, without limitation, as a party or a witness) or is threatened to be made so involved in any threatened, pending or completed investigation, claim, action, suit or proceeding, whether civil, criminal, administrative or investigative (including without limitation, any action, suit or proceeding by or in the right of the Corporation to procure a judgment in its favor) (a "Proceeding") by reason of the fact that the Indemnatee (i) is or was a director, officer, employee or agent of the Corporation, or (ii) is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise (including, without limitation, any employee benefit plan) against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such Proceeding; provided, however, that except as provided in Section 4(d), the foregoing shall not apply to a director or officer of the Corporation with respect to a Proceeding that was commenced by such director or officer prior to a Change in Control (as hereinafter defined), but only in the case of clause (ii) to the extent the Indemnatee is not fully indemnified therefor by such other corporation, partnership, joint venture, trust or other enterprise. Such indemnification shall be a contract right and shall include the right to receive payment in advance of a final determination of entitlement thereto pursuant to the provisions of this Article of any expenses incurred by the Indemnatee in connection with such Proceeding, consistent with the provisions of applicable law as then in effect. (b) The Corporation may to the extent authorized at any time or from time to time by the Board of Directors and permitted by applicable law as then in effect indemnify any person who is not or was not a director or officer of the Corporation but is or was an employee or agent of the Corporation or a director, officer, employee or agent of any subsidiary of the Corporation who was or is involved in any Proceeding by reason of the fact that such person (i) is or was an employee or agent of the Corporation, (ii) is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise (including, without limitation, any employee benefit plan), or (iii) is or was a director, officer, employee or agent of any subsidiary of the Corporation against any

expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such Proceeding.

SECTION 2. Insurance, etc. The Corporation may purchase and maintain insurance or use any other method that may be available from time to time to protect itself, and any Indemnitee and any other person permitted to be indemnified pursuant to this Article against any expenses, judgments, fines and amounts paid in settlement as specified in Section 1 of this Article or incurred by any Indemnitee or other such person in connection with any Proceeding referred to in Section 1 of this Article, to the fullest extent permitted by applicable law as then in effect.

SECTION 3. Indemnification; Not Exclusive Right. The indemnification provided for in this Article shall not be exclusive of any other rights to which those seeking indemnification may otherwise be entitled, and the provisions of this Article shall inure to the benefit of the heirs and legal representatives of any person entitled to indemnity under this Article and shall be applicable to Proceedings commenced or continuing after the adoption of this Article, whether arising from acts or omissions occurring before or after such adoption.

SECTION 4. Advancement of Expenses; Procedures; Presumptions and Effect of Certain Proceedings; Remedies. In furtherance, but not in limitation of the foregoing provisions, the following procedures, presumptions and remedies shall apply with respect to advancement of expenses and the right to indemnification under this Article:

(a) Advancement of Expenses. All reasonable expenses incurred by or on behalf of the Indemnitee in connection with any Proceeding shall be advanced to the Indemnitee by the Corporation within 20 days after the receipt by the Corporation of a statement or statements from the Indemnitee or the Indemnitee's agent requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the expenses incurred by the Indemnitee and, if required by law at the time of such advance, shall include or be accompanied by an undertaking by or on behalf of the Indemnitee to repay the amounts advanced if it should ultimately be determined that the Indemnitee is not entitled to be indemnified against such expenses pursuant to this Article.

(b) Procedure for Determination of Entitlement to Indemnification. (i) To obtain indemnification under this Article, an Indemnitee shall submit to the Secretary of the Corporation a written request, including such documentation and information as is reasonably available to the Indemnitee and reasonably necessary to determine whether and to what extent the Indemnitee is entitled to indemnification (the "Supporting Documentation"). The determination of the Indemnitee's entitlement to indemnification shall be made not later than 90 days (or such greater number of days to which the Indemnitee shall have agreed) after receipt by the Corporation of the written request for indemnification together with the Supporting Documentation. The Secretary of the Corporation shall,

promptly upon receipt of such a request for indemnification, advise the Board of Directors in writing that the Indemnitee has requested indemnification. (ii) The Indemnitee's entitlement to indemnification under this Article shall be determined in one of the following ways: (A) by a majority vote of the Disinterested Directors (as hereinafter defined), if they constitute a quorum of the Board of Directors; (B) by a written opinion of Independent Counsel (as hereafter defined) if (x) a Change of Control (as hereinafter defined) shall have occurred and the Indemnitee so requests or (y) a quorum of the Board of Directors consisting of Disinterested Directors is not obtainable or, even if obtainable, a majority of such Disinterested Directors so directs; (C) by the stockholders of the Corporation (but only if a majority of the Disinterested Directors, if they constitute a quorum of the Board of Directors, presents the issue of entitlement to indemnification to the stockholders for their determination); or (D) as provided in Section 4(c). (iii) In the event the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 4(b)(ii), a majority of the Disinterested Directors shall select the Independent Counsel, but only an Independent Counsel to which the Indemnitee does not reasonably object; provided, however, that if a Change of Control shall have occurred, the Indemnitee shall select such Independent Counsel, but only an Independent Counsel to which the Board of Directors does not reasonably object.

(c) Presumptions and Effect of Certain Proceedings. Except as otherwise expressly provided in this Article, if a Change of Control shall have occurred the Indemnitee shall be presumed to be entitled to indemnification under this Article upon submission of a request for indemnification together with the Supporting Documentation in accordance with Section 4(b)(i), and thereafter the Corporation shall have the burden of proof to overcome that presumption in reaching a contrary determination. In any event, if the person or persons empowered under Section 4(b) to determine entitlement to indemnification shall not have been appointed or shall not have made a determination within 90 days (or such greater number of days to which the Indemnitee shall have agreed) after receipt by the Corporation of the request therefor together with the Supporting Documentation, the Indemnitee shall be deemed to be entitled to indemnification. The termination of any Proceeding, or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, adversely affect the right of the Indemnitee to indemnification or create a presumption that the Indemnitee did not act in good faith and in a manner which the Indemnitee reasonably believed to be in or not opposed to the best interests of the Corporation or, with respect to any criminal Proceeding, that the Indemnitee had reasonable cause to believe that such conduct was unlawful.

(d) Remedies of Indemnatee. (i) In the event that a determination is made pursuant to Section 4(b) that the Indemnatee is not entitled to indemnification under this Article, (A) the Indemnatee shall be entitled to seek an adjudication of entitlement to such indemnification either, at the Indemnatee's sole option, in (x) an appropriate court of the State of Delaware or any other court of competent jurisdiction or (y) an arbitration to be conducted by a single arbitrator pursuant to the rules of the American Arbitration Association; (B) any such judicial proceeding or arbitration shall be de novo and the Indemnatee shall not be prejudiced by reason of such adverse determination; and (C) if a Change of Control shall have occurred, in any such judicial proceeding or arbitration the Corporation shall have the burden of proving that the Indemnatee is not entitled to indemnification under this Article. (ii) If a determination shall have been made or deemed to have been made, pursuant to Section 4(b) or (c), that the Indemnatee is entitled to indemnification, the Corporation shall be obligated to pay the amounts constituting such indemnification within five days after such determination has been made or deemed to have been made and shall be conclusively bound by such determination unless (A) the Indemnatee misrepresented or failed to disclose a material fact in making the request for indemnification or in the Supporting Documentation or (B) such indemnification is prohibited by law. In the event that (x) advancement of expenses is not timely made pursuant to Section 4(a) or (y) payment of indemnification is not made within five days after a determination of entitlement to indemnification has been made or deemed to have been made pursuant to Section 4(b) or (c), the Indemnatee shall be entitled to seek judicial enforcement of the Corporation's obligation to pay to the Indemnatee such advancement of expenses or indemnification. Notwithstanding the foregoing, the Corporation may bring an action, in an appropriate court in the State of Delaware or any other court of competent jurisdiction, contesting the right of the Indemnatee to receive indemnification hereunder due to the occurrence of an event described in subclause (A) or (B) of this clause (ii) (a "Disqualifying Event"); provided, however, that in any such action the Corporation shall have the burden of proving the occurrence of such Disqualifying Event. (iii) The Corporation shall be precluded from asserting in any judicial proceeding or arbitration commenced pursuant to this Section 4(d) that the procedures and presumptions of this Article are not valid, binding and enforceable and shall stipulate in any such court or before any such arbitrator that the Corporation is bound by all the provisions of this Article. (iv) In the event that the Indemnatee, pursuant to this Section 4(d), seeks a judicial adjudication of or an award in arbitration to enforce rights under, or to recover damages for breach of, this Article, the Indemnatee shall be entitled to recover from the Corporation, and shall be indemnified by the Corporation against, any expenses actually and reasonably incurred by the Indemnatee in connection with such judicial adjudication or arbitration. If it shall be determined in such judicial

adjudication or arbitration that the Indemnatee is entitled to receive part but not all the indemnification or advancement of expenses sought, the expenses incurred by the Indemnatee in connection with such judicial adjudication or arbitration shall be prorated accordingly.

(e) Indemnification by Another Enterprise. Notwithstanding anything to the contrary contained in this Section 4, if the Indemnatee shall receive indemnification in connection with any Proceeding from another corporation, partnership, joint venture, trust or other enterprise of which the Indemnatee is serving as a director, officer, employee or agent at the request of the Corporation, the Indemnatee shall promptly refund to the Corporation amounts advanced or paid to the Indemnatee pursuant to Section 4(a) or 4(d)(ii) in connection with such Proceeding to the extent such other corporation, partnership, joint venture, trust or other enterprise has indemnified the Indemnatee for such amounts.

(f) Definitions. For purposes of this Section 4: (i) "Change in Control" means a change in control of the Corporation of a nature that would be required to be reported in response to Item 6(e) (or any successor provision) of Schedule 14A of Regulation 14A promulgated under the Securities Exchange Act of 1934 (the "Act"), whether or not the Corporation is then subject to such reporting requirement; provided that, without limitation, such a change in control shall be deemed to have occurred if (A) any "person" (as such term is used in Sections 13(d) and 14(d) of the Act) is or becomes the "beneficial owner" (as defined in Rule 13d-3 under the Act), directly or indirectly, of securities of the Corporation representing 30% or more of the combined voting power of the corporation's then outstanding securities without the prior approval of at least two-thirds of the members of the Board of Directors in office immediately prior to such acquisition; (B) the Corporation is a party to any merger or consolidation in which the corporation is not the continuing or surviving corporation or pursuant to which shares of the Corporation's Common Stock would be converted into cash, securities or other property, other than a merger of the Corporation in which the holders of the Corporation's Common Stock immediately prior to the merger have the same proportionate ownership of common stock of the surviving corporation immediately after the merger; (C) there is a sale, lease, exchange or other transfer (in one transaction or a series of related transactions) of all, or substantially all, the assets of the Corporation, or a liquidation or dissolution of the Corporation; or (D) during any period of two consecutive years, individuals who at the beginning of such period constituted the Board of Directors (including for this purpose any new director whose election or nomination for election by the Corporation's stockholders was approved by a vote of at least a majority of the directors then still in office who were directors at the beginning of such period) cease for any reason to constitute at least a majority of the Board of Directors. (ii) "Disinterested Director" means a director of the Corporation

who is not or was not a party to the Proceeding in respect of which indemnification is sought by the Indemnatee. (iii) "Independent Counsel" means a law firm or a member of a law firm that neither presently is, nor in the past five years has been, retained to represent: (x) the Corporation or the Indemnatee in any matter material to either such party or (y) any other party to the Proceeding giving rise to a claim for indemnification under this Article. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing under the law of the State of Delaware, would have a conflict of interest in representing either the Corporation or the Indemnatee in an action to determine the Indemnatee's rights under this Article.

SECTION 5. Effect of Amendments. Neither the amendment or repeal of, nor the adoption of a provision inconsistent with, any provision of this Article (including, without limitation, this Section 5) shall adversely affect the rights of any director or officer under this Article (x) with respect to any Proceeding commenced or threatened prior to such amendment, repeal or adoption of any inconsistent provision or (y) if such amendment, repeal or adoption occurs after a Change in Control, with respect to any Proceeding arising out of any action or omission occurring prior to such amendment, repeal or adoption of any inconsistent provision, in either case without the written consent of such director or officer.

SECTION 6. Severability. If any provision or provisions of this Article shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (a) the validity, legality and enforceability of the remaining provisions of this Article (including, without limitation, all portions of any paragraph of this Article containing any such provision held to be invalid, illegal or unenforceable, that are not themselves invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby; and (b) to the fullest extent possible, the provisions of this Article (including, without limitation, all portions of any paragraph of this Article containing any such provision held to be invalid, illegal or unenforceable, that are not themselves invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, illegal or unenforceable.

ARTICLE XII

Amendments

These By-laws may be altered or repealed by the vote of a majority of the whole Board, subject to the power of the holders of a majority of the outstanding stock of the Corporation entitled to vote in respect thereof, by their vote given at an annual meeting or at any special meeting, to alter or repeal any By-law made by the Board.