ALTAIR NANOTECHNOLOGIES INC

Form S-4 December 23, 2011

As filed with the Securities and Exchange Commission on December 22, 2011

Registration No. 333-__

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

Form S-4

REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933

Altair Nanotechnologies Inc. (Exact Name of Registrant as Specified in Its Charter)

Canada* 2890 33-1084375
(State or Other Jurisdiction of Incorporation) Classification Code Number) Identification Number)

204 Edison Way Reno, Nevada 89502 (775) 856-2500

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

Stephen B. Huang
204 Edison Way
Reno, Nevada 89502
(775) 856-2500
with a copy to:
Bryan T. Allen, Esq.
Parr Brown Gee & Loveless
185 South State Street, Suite 800
Salt Lake City, Utah 84111
Phone: (801) 257-7963
Facsimile: (801) 532-7750

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

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective and the consummation of the domestication transaction covered hereby.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. o

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

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

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

Large accelerated Accelerated filer o Non-accelerated Smaller reporting filer o filer o company x

(Do not check if a smaller reporting company)

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-border Issuer Tender Offer) o

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer) o

CALCULATION OF REGISTRATION FEE

Title of Each Class of	Amount to be	Proposed Maximum Offering Price per	Proposed Maximum Aggregate	Amount of Registration
Securities to be Registered	Registered(1)	Share(2)	Offering Price	Fee
Common stock, .001 par value(3)				
Rights associated with Common Stock(3)	73,565,143	\$0.875	\$64,369,500	\$7,377

- (1) Represents shares of common stock of Altair Nanotechnologies, Inc., a to-be-formed Delaware corporation, being registered in connection with the domestication of Altair Nanotechnologies, Inc., a corporation organized under the federal laws of Canada, assuming that the proposed resolution is approved by the shareholders and the domestication is consummated. Number of shares registered is estimated based upon the 73,565,143common shares of Altair Nanotechnologies Inc., a Canadian corporation, outstanding on the date of filling, together with the number of common shares subject to outstanding options and warrants to purchase common shares.
- (2) Estimated pursuant to Rule 457(c) solely for the purpose of calculating the registration fee based on the average of the high and low prices for the common shares of the Registrant as reported on the NASDAQ Capital Market on December 16, 2011
- (3) Each share of common stock includes an attached right arising under and subject to the terms described in the Amended and Restated Shareholder Rights Plan Agreement dated October 15, 1999, as amended by those certain amendments dated October 5, 2008, September 20, 2010 and July 10, 2011 between the Registrant and Equity Financial Trust Company, as the Rights Agent. Until the occurrence of events described in such agreement, the rights are not exercisable, are evidenced by the common stock and transfer with, and only with, the common stock.

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

* The Registrant intends, subject to shareholder approval, to effect a domestication under Section 388 of the Delaware General Corporation Law, pursuant to which the Registrant's state of incorporation will be Delaware.

Information contained herein is subject to completion or amendment. A registration statement relating to these securities has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This document shall not constitute an offer to sell or the solicitation of any offer to buy nor shall there be any sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction.

PRELIMINARY — SUBJECT TO COMPLETION — DATED DECEMBER 22, 2011

Altair Nanotechnologies Inc.

Common Shares

PROPOSED DOMESTICATION — YOUR VOTE IS VERY IMPORTANT

We are furnishing this management proxy circular to shareholders of Altair Nanotechnologies Inc., in connection with the solicitation of proxies by our management for use at a special meeting of our shareholders. The special meeting will be held on , 2012 at 10:00 o'clock in the morning (Pacific time), in Reno, Nevada.

The purpose of the special meeting is to obtain shareholder approval to change our jurisdiction of incorporation from the federal jurisdiction of Canada to the State of Delaware in the United States through the adoption of articles of domestication and a new certificate of incorporation. This change in jurisdiction of incorporation is referred to as a "continuance" under Canadian law and as a "domestication" under Delaware law.

We believe that the domestication will enhance our ability to engage in strategic joint ventures, acquisition and disposition transactions, eliminate certain regulatory burdens imposed by the Canada Business Corporations Act, limit reporting requirements under the Canadian securities laws, and give us flexibility in our management structure.

Approval of the proposed domestication requires affirmative votes, whether in person or by proxy, from at least two-thirds of the votes cast with respect to the matter by the holders of our common shares at the special meeting where a quorum of one-third of the total outstanding common shares is present. Dissenting shareholders have the right to be paid the fair value of their shares under Section 190 of the Canada Business Corporations Act. Our Board of Directors has reserved the right to terminate or abandon our domestication at any time prior to its effectiveness, notwithstanding shareholder approval, if it determines for any reason that the consummation of our domestication would be inadvisable or not in our and your best interests. If approved by our shareholders, it is anticipated that the domestication will become effective on a date within 90 days of the special meeting of our shareholders.

Your existing certificates representing your Altair Nanotechnologies Inc. common shares will represent the same number of shares of common stock after the domestication without any action on your part. You will not have to exchange any share certificates. We will issue new certificates or book entry share statements, as applicable, to you representing shares of capital stock of Altair Nanotechnologies Inc. as a Delaware corporation upon a transfer of the shares by you or at your request. Following the completion of our domestication, the common stock will continue to be listed on the NASDAQ Capital Market under the trading symbol "ALTI."

The accompanying management proxy circular provides a detailed description of our proposed domestication and other information to assist you in considering the proposals on which you are asked to vote. We urge you to review this information carefully and, if you require assistance, to consult with your financial, tax or other professional advisers.

Our Board of Directors unanimously recommends that you vote FOR each of the proposals described in this management proxy circular, including the approval of our domestication.

Your vote is very important. Whether or not you plan to attend the special meeting, we ask that you indicate the manner in which you wish your shares to be voted and sign and return your proxy as promptly as possible in the enclosed envelope so that your vote may be recorded. If your shares are registered in your name, you may vote your shares in person if you attend the special meeting, even if you send in your proxy.

These securities involve a high degree of risk. See "Risk Factors" beginning on page 10 of this management proxy circular for a discussion of specified matters that should be considered.

Neither the Securities and Exchange Commission nor any state securities commission or similar authority in Canada, has approved or disapproved of these securities or determined if the management proxy circular/prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

This management proxy circular/prospectus is dated December 22, 2011 and is first being mailed to shareholders on or about , 2012.

ALTAIR NANOTECHNOLOGIES INC. 204 Edison Way Reno, Nevada 89502

NOTICE OF SPECIAL MEETING OF SHAREHOLDERS

NOTICE IS HEREBY GIVEN that the special meeting of the shareholders of Altair Nanotechnologies Inc. (the "Company") will be held at the one, on the day of 2012, at the hour of 10:00 o'clock in the morning (Pacific time) for the following purpose:

To consider, and if deemed advisable, approve a special resolution authorizing the Company to make an application under Section 188 of the Canada Business Corporations Act to change its jurisdiction of incorporation from the federal jurisdiction of Canada to the State of Delaware by way of a domestication under Section 388 of the Delaware General Corporation Law, and to approve the certificate of incorporation authorized in the special resolution to be effective as of the date of the Company's domestication.

This notice is accompanied by a form of proxy and a management proxy circular.

Shareholders who are unable to attend the special meeting in person are requested to complete, date, sign and return the enclosed form of proxy so that as large a representation as possible may be had at the special meeting. Proxies to be used at the special meeting must be deposited at the office of the transfer agent not later than 48 hours (excluding Saturdays and holidays) before the time of holding the special meeting.

DATED at Toronto, Ontario as of the day of 2012.

BY: ORDER OF THE BOARD

H. Frank Gibbard President and Chief Executive Officer

MANAGEMENT PROXY CIRCULAR

TABLE OF CONTENTS

SUMMARY	1
Questions and Answers about the Proposals	1
The Domestication Proposal	5
Regulatory and Other Approvals	5
Comparison of Shareholder Rights	5
Accounting Treatment of the Domestication	6
Dissent Rights of Shareholders	6
Tax Consequences of the Domestication	6
Selected Financial Data	9
RISK FACTORS	10
Risks Relating to the Domestication	10
Risks Relating to Our Company	12
THE SPECIAL MEETING	25
Solicitation of Proxies	25
Appointment and Revocation of Proxies	25
Voting of Proxies	26
Voting Securities and Principal Holders of Voting Securities	26
Change of Control	27
Exchange Rate Information	27
PROPOSAL NO. 1 – THE DOMESTICATION	28
General	28
Principal Reasons for the Domestication	28
Effects of the Domestication	29
Officers and Directors	30
Treatment of Outstanding Capital Stock, Options and Warrants	30
The Shareholder Rights Plan	30
Treatment of Effective Registration Statements	30
Shareholder Approval	31
Regulatory and Other Approvals and Board Discretion	31
Comparison of Shareholder Rights	31
Proposed Certificate of Incorporation and Bylaws of Altair Delaware	38
Dissent Rights of Shareholders	39
Accounting Treatment of the Domestication	41
United States Federal Income Tax Considerations	41
Canadian Federal Income Tax Considerations	48
DESCRIPTION OF OUR CAPITAL STOCK	53
Altair Delaware Common Stock	53
Change of Control Provisions in the Rights Agreement	53
Potential Anti-takeover Effect of Delaware Law, Our Certificate of Incorporation and	56
Bylaws	
OUR BUSINESS	58
Our Power and Energy Group	58
Our All Other Division	65
Research and Development Expenses	66

Dependence on Significant Customers		
Government Regulation	66	
Government Contracts	66	
Environmental Regulation and Liability	67	
Financial Information about Segments and Foreign Sales	67	
Subsidiaries	67	
Corporate History	68	

iii

Employees		68
Enforceability of Civil Liabilities against Foreign Persons		68
Properties		69
Legal Proceedings		69
CERTAIN MATTERS RELATED TO OUR COMMON SHARES	70	
Market Price		70
Outstanding Shares and Number of Shareholders		70
Dividends		70
Securities Authorized for Issuance under Equity Compensation Plans		70
Transfer Agent and Registrar		71
CERTAIN FINANCIAL INFORMATION	72	
Selected Financial Data		72
Supplementary Financial Data		72
Financial Statements		73
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION	74	
AND RESULTS OF OPERATIONS		
Overview		74
General Outlook		75
Contracts and Grants		76
Liquidity and Capital Investments		76
Capital Commitments and Expenditures		78
Off-Balance Sheet Arrangements		78
Critical Accounting Policies and Estimates		78
Results of Operations		79
Quantitative and Qualitative Disclosures about Market Risk		86
MANAGEMENT AND COMPENSATION INFORMATION	87	
Directors		87
Executive Officers		92
Certain Relationships and Related Transactions		94
Compensation, Nominating and Governance Committee		95
Committee Membership and Independence		95
Compensation, Nominating and Governance Committee Interlocks and Insider		95
Participation		-
Summary Compensation Table		96
Grant of Plan-Based Awards Table		97
Outstanding Equity Awards at Fiscal Year-End Table		99
Option Exercises and Stock Vested		00
Pension Benefits and Non-Qualified Deferred Compensation		00
Potential Payments upon Termination or Change-in-Control		00
Director Compensation		02
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND	104	
MANAGEMENT	Ž.	
INTEREST OF MANAGEMENT IN THE PROPOSALS TO BE ACTED UPON	106	5
LEGAL MATTERS	106	
EXPERTS	106	
WHERE YOU CAN FIND MORE INFORMATION	106	
OTHER MATTERS	107	

Proposals of Shareholders	107
Undertakings	107
Additional Information	107
INDEX TO FINANCIAL STATEMENTS	108

iv

ALTAIR NANOTECHNOLOGIES INC.

MANAGEMENT PROXY CIRCULAR

(All dollar amounts expressed herein are U.S. dollars)

SUMMARY

This summary highlights selected information appearing elsewhere in this management proxy circular, or this Circular, and does not contain all the information that you should consider in making a decision with respect to the proposals described in this Circular. You should read this summary together with the more detailed information, including our financial statements and the related notes included in this Circular, and the exhibits attached hereto. You should carefully consider, among other things, the matters discussed in "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" which are included in this Circular. You should read this Circular in its entirety.

Unless otherwise provided in this Circular, references to the "Company," "we," "us," and "our" refer to Altai Nanotechnologies Inc., a Canadian corporation, prior to the change of jurisdiction. References to "Altair Delaware" refer solely to Altair Nanotechnologies Inc, a Delaware corporation, as of the effective time of the change in jurisdiction. References to "Altair Canada" refer solely to Altair Nanotechnologies Inc., a Canadian corporation, prior to the effective time of the change in jurisdiction. Masculine pronouns include the female and the neuter as appropriate. We have registered or are in the process of registering the following trademarks: Altair Nanotechnologies Inc®, Altair Nanomaterials, Inc.®, Altairnano®, TiNano® and Nanocheck®. Any other trademarks and service marks used in this Circular are the property of their respective holders.

Altair Nanotechnologies Inc. is a Canadian corporation with principal assets and operations in the United States, whose primary business is developing and commercializing nano-lithium titanate based power and energy systems.

Set forth below in a question and answer format is general information regarding the special meeting of shareholders to which this Circular relates. This general information regarding the special meeting is followed by a more detailed summary of the process relating to, reasons for and effects of our proposed change in jurisdiction of incorporation (Proposal 1 in the Notice of Meeting), which we refer to in this Circular as the "domestication".

Questions and Answers about the Proposals

Q. What is the purpose of the special meeting?

A. The purpose of the special meeting is to vote on a special resolution authorizing the Company to make an application under Section 188 of the Canada Business Corporations Act, referred to as the CBCA, to change its jurisdiction of incorporation from the federal jurisdiction of Canada to the State of Delaware by way of a domestication under Section 388 of the Delaware General Corporation Law, referred to as the DGCL, and to approve the certificate of incorporation authorized in the special resolution to be effective as of the date of the Company's domestication.

Q. Where will the special meeting be held?

A. The special meeting will be held at the , on Wednesday, the day of , 2012, at the hour of 10:00 o'clock in the morning (Pacific time).

Q. Who is soliciting my vote?

A.Our Board of Directors is soliciting your proxy to vote at the special meeting. This Circular and form of proxies were first mailed to our shareholders on or about 3012. Your vote is important. We encourage you to vote as soon as possible after reviewing this Circular and all information delivered with this Circular.

Q. Who is entitled to vote?

- A. The record date for the determination of shareholders entitled to receive notice of the special meeting is January 4, 2012. As of such date, there are common shares outstanding, each of which is entitled to one vote on all matters presented at the special meeting. In accordance with the provisions of the Canada Business Corporations Act, or the CBCA, we will prepare a list of the holders of our common shares as of the record date.
- Q. What are the voting recommendations of the Board of Directors?
- A. The Board of Directors recommends that shareholders vote FOR the special resolution authorizing the Company to make an application under Section 188 of the CBCA to change its jurisdiction of incorporation from the federal jurisdiction of Canada to the State of Delaware by way of a domestication under Section 388 of the DGCL, and to approve the certificate of incorporation authorized in the special resolution to be effective as of the date of the Company's domestication.
- Q. Will any other matters be voted on?
- A. The Board of Directors does not intend to present any other matters at the special meeting. The Board of Directors does not know of any other matters that will be brought before our shareholders for a vote at the special meeting. If any other matter is properly brought before the special meeting, your signed proxy card gives authority to H. Frank Gibbard and, failing him, Stephen B. Huang, or your indicated nominee as proxies, with full power of substitution, to vote on such matters at their discretion.
- Q. What is the difference between holding shares as a shareholder of record and as a beneficial owner?
- A.Many shareholders hold their shares through a broker or bank rather than directly in their own names. As summarized below, there are some distinctions between shares held of record and those owned beneficially.

Shareholder of Record — If your shares are registered directly in your name with our transfer agent, you are considered, with respect to those shares, the shareholder of record, and these Circular materials are being sent directly to you by us. You may vote the shares registered directly in your name by completing and mailing the proxy card or by written ballot at the special meeting.

Beneficial Owner — If your shares are held in a stock brokerage account or by a bank, you are considered the beneficial owner of shares held in street name, and these Circular materials are being forwarded to you by your bank or broker, which is considered the shareholder of record of these shares. As the beneficial owner, you have the right to direct your bank or broker how to vote and are also invited to attend the special meeting. However, since you are not the shareholder of record, you may not vote these shares in person at the special meeting unless you bring with you a legal proxy from the shareholder of record. Your bank or broker has enclosed a voting instruction card providing directions for how to vote your shares.

- Q. How are shares held by a broker or other intermediary voted?
- A. Brokers and other intermediaries who have record ownership of our common shares held in brokerage accounts for their clients who beneficially own the shares are subject to rules governing how they can vote the shares. Under these rules, brokers and other intermediaries who do not receive voting instructions from their clients have the discretion to vote uninstructed shares on certain matters ("discretionary matters"), but do not have discretion to vote uninstructed shares as to certain other matters ("non-discretionary matters"). A broker or intermediary may return a proxy card on behalf of a beneficial owner from whom the broker has not received instructions that casts a vote

with regard to discretionary matters, but expressly states that the broker is not voting as to non-discretionary matters. The broker's or other intermediary's inability to vote with respect to the non-discretionary matters is referred to as a "broker non-vote." Partial broker non-votes will be counted for the purpose of determining the presence of a quorum; total broker non-votes will not be counted for the purpose of determining the presence of a quorum.

If you hold your shares in "street name," we encourage you to contact your broker with your voting instructions as soon as possible. The domestication resolution (Proposal No. 1) is considered to be a discretionary matter. As a result, your broker or other intermediary does not have the ability to vote on your behalf, and no vote will be cast for your shares for this matter unless you provide your broker with voting instructions.

An abstention, or withhold vote, is counted as present and entitled to vote for purposes of determining a quorum. An abstention, or withhold vote, will have no effect on the domestication resolution (Proposal No. 1).

Q. How do I vote?

A. If you are a shareholder of record, there are two ways to vote:

- By completing and mailing your proxy card; or
- By written ballot at the special meeting.

Shareholders who are not shareholders of record and who wish to file proxies should follow the instructions of their intermediary with respect to the procedure to be followed. Generally, shareholders who are not shareholders of record will either: (i) be provided with a proxy executed by the intermediary, as the shareholder of record, but otherwise uncompleted and the beneficial owner may complete the proxy and return it directly to our transfer agent; or (ii) be provided with a request for voting instructions by the intermediary, as the shareholder of record, and then the intermediary must send to our transfer agent an executed proxy form completed in accordance with any voting instructions received by it from the beneficial owner and may not vote in the event that no instructions are received.

Q. Can I change my vote or revoke my proxy?

A. A shareholder of record who has given a proxy has the power to revoke it prior to the commencement of the special meeting by depositing an instrument in writing, including another proxy bearing a later date, executed by the shareholder or by the shareholder's attorney authorized in writing either (i) at the Company's principal office located at 204 Edison Way, Reno, Nevada, 89502 at any time up to and including the last business day preceding the day of the special meeting, or any adjournment thereof or (ii) with the chairman of such meeting on the day of the special meeting or any adjournment thereof or in any other manner permitted by law.

Q. How are votes counted?

A. We will appoint a Scrutineer at the special meeting. The Scrutineer is typically a representative of our transfer agent. The Scrutineer will collect all proxies and ballots, and tabulate the results.

Q. Who pays for soliciting proxies?

A. The cost of solicitation by management will be borne directly by the Company. Arrangements will also be made with brokerage houses and other custodians, nominees and fiduciaries for the forwarding of solicitation materials to the beneficial owners of the common shares of the Company held of record by such persons, and we will reimburse them for their reasonable out-of-pocket expenses incurred by them in connection therewith.

Q. What is the quorum requirement of the special meeting?

A. One-third of the outstanding common shares entitled to vote, represented in person or by properly executed proxy, is required for a quorum at the special meeting.

Q. What are broker non-votes?

A. Broker non-votes occur when holders of record, such as banks and brokers holding shares on behalf of beneficial owners, do not receive voting instructions from the beneficial holders at least ten days before the special meeting. Broker non-votes will not affect the outcome of the matters being voted on at the special meeting, assuming that a quorum is obtained.

- Q. What vote is required to approve the proposal?
- A. Proposal No. 1, our change of jurisdiction from Canada to Delaware by means of a domestication requires affirmative votes, whether in person or by proxy, from at least two-thirds of the votes cast by the holders of our common shares with respect to the matter at the special meeting where a quorum of one-third of the total outstanding common shares is present.

Of the outstanding common shares as of the Record Date, approximately 42,140,231 are owned by officers, directors and their affiliates, representing 60.7% of the outstanding common shares as of such date.

Q. Who can attend the special meeting?

- A. All registered shareholders, their duly appointed representatives, our directors and our auditors are entitled to attend the special meeting.
- Q.I own my shares indirectly through my broker, bank, or other nominee, and I receive multiple copies of the Circular and other mailings because more than one person in my household is a beneficial owner. How can I change the number of copies of these mailings that are sent to my household?
- A. If you and other members of your household are beneficial owners, you may eliminate this duplication of mailings by contacting your broker, bank, or other nominee. Duplicate mailings in most cases are wasteful for us and inconvenient for you, and we encourage you to eliminate them whenever you can. If you have eliminated duplicate mailings, but for any reason would like to resume them, you must contact your broker, bank, or other nominee. If you are a shareholder of record contact Stephen B. Huang, Chief Financial Officer, by phone at (775) 858-3750 or by mail to P.O. Box 10630, Reno, Nevada, U.S.A. 89510-0630.
- Q.Multiple shareholders live in my household, and together we received only one copy of this Circular. How can I obtain my own separate copy of those documents for the Annual and Special meeting?
- A. You may pick up copies in person at the special meeting or download them from our Internet web site, www.altairannualmeeting.com. If you want copies mailed to you and are a beneficial owner, you must request them from your broker, bank, or other nominee. If you want copies mailed to you and are a shareholder of record, we will mail them promptly if you request them from Stephen B. Huang, Chief Financial Officer by phone at (775) 858-3750 or by mail to P.O. Box 10630, Reno, Nevada, U.S.A. 89510-0630. We cannot guarantee you will receive mailed copies before the special meeting.
- Q. Where can I find the voting results of the special meeting?
- A. We are required to file the voting results on the System for Electronic Document Analysis and Retrieval (SEDAR) promptly following the special meeting, and thereafter they can be found on the SEDAR website at www.sedar.com. We are also required to file the voting results on a Current Report on Form 8-K with the SEC promptly following the special meeting, and thereafter they can be found on our website at www.altairnano.com (select the link to SEC Filings on the Investor Relations page).
- Q. Who can help answer my questions?
- A. If you have questions about the special meeting or if you need additional copies of this Circular or the enclosed proxy card you should contact:

Stephen B. Huang, Chief Financial Officer P.O. Box 10630 Reno, Nevada 89510-0630 U.S.A. (775) 858-3750

The Domestication Proposal

The Board of Directors is proposing to change our jurisdiction of incorporation from the federal jurisdiction of Canada to the State of Delaware through a transaction called a "continuance" under Section 188 of the CBCA, also referred to as a "domestication" under Section 388 of the DGCL, and approve a new certificate of incorporation to be effective on the date of the domestication. We will become subject to the DGCL on the date of our domestication, but will be deemed for the purposes of the DGCL to have commenced our existence in Delaware on the date we originally commenced our existence in Canada. Under the DGCL, a corporation becomes domesticated in Delaware by filing a Certificate of Corporate Domestication and a certificate of incorporation for the corporation being domesticated. Our Board of Directors has unanimously approved our domestication and the related certificate of incorporation of Altair Delaware, believes it to be in our best interests and in the best interests of our shareholders, and unanimously recommends approval of the domestication and the approval of the certificate of incorporation of Altair Delaware to our shareholders.

We believe that the domestication will enhance our ability to engage in strategic joint venture, acquisition and disposition transactions, eliminate certain regulatory burdens imposed by the CBCA, limit reporting requirements under the Canadian securities laws, and give us flexibility in our management structure. Based upon our expectation that the Company will be more valuable in the future, we believe it is favorable for us to undertake the domestication now in order to avoid a potentially much higher cost in the future, as the Canadian tax consequences are based on the Company's valuation.

The domestication will change the governing law that applies to our shareholders from the federal jurisdiction of Canada to the State of Delaware. There are material differences between the CBCA and the DGCL. Our shareholders may have more or fewer rights under the DGCL depending on the specific set of circumstances.

We plan to complete the proposed domestication within 90 days of approval by our shareholders. The domestication will be effective on the date set forth in the articles of domestication and a certificate of incorporation, as filed with the Secretary of State of the State of Delaware. Thereafter, Altair Delaware will be subject to the certificate of incorporation filed in Delaware. We will be discontinued in Canada as of the date shown on the certificate of discontinuance issued by the Director appointed under the CBCA, which is expected to be the same date as the date of the filing of the articles of domestication and a certificate of incorporation in Delaware. However, the Board of Directors may decide to delay the domestication or not to proceed with the domestication after receiving approval from our shareholders if it determines that the transaction is no longer advisable. The Board of Directors has not considered any alternative action if the domestication is not approved or if it decides to abandon the transaction.

The domestication will not interrupt our corporate existence, our operations or the trading market of our common shares. Each outstanding common share at the time of the domestication will remain issued and outstanding of Altair Delaware after our corporate existence is continued from Canada under the CBCA and domesticated in Delaware under the DGCL. Following the completion of the domestication, Altair Delaware's common stock will continue to be listed on the NASDAQ Capital Market under the symbol "ALTI."

Regulatory and Other Approvals

The continuance is subject to the authorization of the Director appointed under the CBCA. The Director is empowered to authorize the continuance if, among other things, he is satisfied that the continuance will not adversely affect our creditors or shareholders.

Comparison of Shareholder Rights

Upon completion of the domestication, our shareholders will be holders of capital stock of Altair Nanotechnologies, Inc., a Delaware corporation, and their rights will be governed by the DGCL as well as Altair Delaware's certificate of incorporation and bylaws. Shareholders should be aware that the rights they currently have under the CBCA may, with respect to certain matters, be different under the DGCL. For example, under the CBCA, a company has the authority to issue an unlimited number of shares whereas, under the DGCL, a Delaware corporation may only issue the number of shares that is authorized by its certificate of incorporation, and shareholder approval must be obtained to amend the certificate of incorporation to authorize the issuance of additional shares. On the other hand, under the CBCA, shareholders are entitled to appraisal/dissent rights for a number of extraordinary corporate actions, including an amalgamation with another unrelated corporation, some amendments to a corporation's certificate of incorporation and the sale of all or substantially all of a corporation's assets, whereas under the DGCL, stockholders are only entitled to appraisal/dissent rights for certain mergers. In addition, under the CBCA, shareholders owning at least 5% of our outstanding voting shares have the right to require the board of directors to call a special meeting of shareholders whereas, under the DGCL, stockholders have no right to require the board of directors to call a special meeting. We refer you to the section entitled "The Domestication — Comparison of Shareholder Rights" for a more detailed description of the material differences between the rights of Canadian shareholders and Delaware stockholders.

Accounting Treatment of the Domestication

Our domestication as a Delaware corporation represents a transaction between entities under common control. Assets and liabilities transferred between entities under common control are accounted for at carrying value. Accordingly, the assets and liabilities of Altair Delaware will be reflected at their carrying value to us. Any of our shares that we acquire from dissenting shareholders will be treated as an acquisition of treasury stock at the amount paid for the shares. Under Delaware law, the treasury shares may then be re-issued under the same terms as our authorized shares.

Dissent Rights of Shareholders

If you wish to dissent and do so in compliance with Section 190 of the CBCA, and we proceed with the continuance, you will be entitled to be paid the fair value of the shares you hold. Fair value is determined as of the close of business on the day before the continuance is approved by our shareholders. If you wish to dissent, you must send written objection to the continuance to us at or before the special meeting. If you vote in favor of the continuance, you in effect lose your rights to dissent. If you withhold your vote or vote against the continuance, you preserve your dissent rights to the extent you comply with Section 190 of the CBCA. However, it is not sufficient to vote against the continuance or to withhold your vote. You must also provide a separate dissent notice at or before the special meeting. If you grant a proxy and intend to dissent, the proxy must instruct the proxy holder to vote against the continuance in order to prevent the proxy holder from voting such shares in favor of the continuance and thereby voiding your right to dissent. Under the CBCA, you have no right of partial dissent. Accordingly, you may only dissent as to all your shares. Additional information regarding dissenters rights is set forth under the caption "Proposal 1 — The Domestication — Dissent Rights of Shareholders". In addition, Section 190 of the CBCA is reprinted in its entirety as Exhibit E to this Circular.

Tax Consequences of the Domestication

United States Federal Income Tax Considerations

For the reasons described in greater detail below under the caption "Proposal 1 — The Domestication — United States Federal Income Tax Considerations," we have been advised the change in our jurisdiction of incorporation will

constitute a "reorganization" within the meaning of Section 368(a) of the United States Internal Revenue Code of 1986, as amended, or the Code. If, for any reason, we determine that the domestication would not qualify as a "reorganization," we will abandon the domestication. As a result of the domestication constituting a "reorganization," we will not recognize any gain or loss for U.S. federal income tax purposes on the domestication, other than with respect to our holdings of U.S. real property. With respect to our U.S. real property interests, the domestication will result in our recognizing taxable gain equal to the excess of the fair market value of such U.S. real property on the date of the domestication over our adjusted tax basis in that real property. We estimate that taxable gain to be approximately \$772,000, but can give no assurance that the Internal Revenue Service (the "IRS") will accept our calculation of the amount of the gain. The amount of our actual United States federal income tax liability for the year of the domestication will depend upon our other items of taxable income or loss for the year, including net operating loss carryovers from prior years, but be we anticipate that the approximate \$772,000 gain will result in an approximate \$270,000 first-tier U.S. income tax and an approximate \$232,000 second tier U.S. branch profits tax.

For non-dissenting U.S. shareholders, the domestication also would be tax-free for United States income tax purposes, with two possible exceptions. First, we met the definition of a "passive foreign investment company" under Code Section 1297 during certain taxable periods prior to 2002; accordingly, proposed Treasury Regulations under Code Section 1291(f) will require U.S. holders who acquired their shares of our Company prior to 2002 to recognize taxable gain on the domestication equal to the excess of the fair market value of their shares on the date of domestication over their tax basis in such shares. Second, Code Section 367 has the effect of potentially imposing income tax on certain U.S. holders in connection with the domestication. Pursuant to the Treasury Regulations under Code Section 367, any U.S. holder that owns, directly or through attribution, 10% or more of the combined voting power of all classes of our stock (which we refer to as a 10% shareholder) will have to recognize a deemed dividend on the domestication equal to the "all earnings and profits amount," within the meaning of Treasury Regulation Section 1.367(b)-2, attributable to such holder's shares in the Company. Any U.S. shareholder that is not a 10% shareholder and whose shares have a fair market value of less than \$50,000 on the date of the domestication will recognize no gain or loss as a result of the domestication. A U.S. shareholder that is not a 10% shareholder but whose shares have a fair market value of at least \$50,000 on the date of the domestication must recognize gain (but not loss) on the domestication equal to the excess of the fair market value of the Company stock at the time of the domestication over the shareholder's tax basis in such shares. Such a U.S. holder, however, instead of recognizing gain, may elect to include in income as a deemed dividend the "all earnings and profits amount" attributable to his shares in the Company which we refer to as a "Deemed Dividend Election." Based on available information, we believe that no U.S. shareholder of the Company should have a positive "all earnings and profits amount" attributable to such shareholder's shares in the Company, and accordingly no 10% shareholder or shareholders who makes a Deemed Dividend Election should be subject to tax under Code Section 367 on the domestication. Our determination with respect to the "all earnings and profits amount" results from calculations performed by our accounting firm based on information provided to them by us. However, no assurance can be given that the IRS will agree with us. If it does not, a U.S. shareholder may be subject to adverse U.S. federal income tax consequences under Code Section 367. A U.S. shareholder's tax basis in the shares of Altair Delaware received in the exchange will be equal to such shareholder's tax basis in the shares of the Company, increased by the amount of gain (if any) recognized in connection with the domestication or the amount of the "all earnings and profits amount" included in income by such U.S. shareholder. A U.S. shareholder's holding period in the shares of Altair Delaware should include the period of time during which such shareholder held his shares in the Company, provided that the shares of the Company were held as capital assets.

Canadian Federal Income Tax Considerations

Under the Income Tax Act (Canada), or the ITA, the change in our jurisdiction from Canada to the United States will cause our tax year to end immediately before the continuance. Furthermore, we will be deemed to have disposed of all of our property immediately before the continuance for proceeds of disposition equal to the fair market value of the property at that time. We will be subject to a separate corporate emigration tax equal to the amount by which the fair market value of all of our property immediately before the continuance exceeds the aggregate of our liabilities at that time (other than dividends payable and taxes payable in connection with this emigration tax) and the amount of paid-up capital on all of our issued and outstanding shares. With the assistance of professional advisors, we have reviewed our assets, liabilities, paid-up capital and other tax balances and, assuming that the market price of our common shares does not exceed \$3.70 per share, that the exchange rate of the Canadian dollar to the U.S. dollar is CDN \$1.00 equals U.S. \$1.03395 and that the value of our property does not increase, it is anticipated that there will be no material Canadian federal income taxation arising on the continuance.

Our shareholders who remain holding the shares after the continuance will not be considered to have disposed of their shares by reason only of the continuance. Accordingly, the continuance will not cause shareholders to realize a capital gain or loss on their shares, and there will be no effect on the adjusted cost base of their shares. Our shareholders who dissent to the continuance may be deemed to receive a taxable dividend equal to the amount by which the amount received for their shares, less an amount in respect of interest, if any, awarded by the Court, exceeds the paid-up

capital of such shares, if the shares were cancelled before the continuance became effective. A dissenting shareholder will also be considered to have disposed of the shares for proceeds of disposition equal to the amount paid to such shareholder less an amount in respect of interest, if any, awarded by the Court and the amount of any deemed dividend.

The foregoing is a brief summary of the principal income tax considerations only and is qualified in its entirety by the more detailed description of income tax considerations in the "United States Federal Income Tax Considerations" and "Canadian Federal Income Tax Considerations" subsections under "Proposal No. 1 – The Domestication", of this Circular, which shareholders are urged to read. This summary does not discuss all aspects of United States and Canadian tax consequences that may apply in connection with the domestication. Shareholders should consult their own tax advisors as to the tax consequences of the domestication applicable to them. In addition, please note that other tax consequences may arise under applicable law in other countries.

Selected Financial Data

The table below presents our selected historical consolidated financial data as of and for each of the five years ended December 31, 2010, 2009, 2008, 2007 and 2006. The selected historical consolidated financial data as of and for the five years ended December 31, 2010 is derived from our audited consolidated financial statements, which have been audited by Perry-Smith LLP, an independent registered public accounting firm and are included in this Circular.

The selected historical consolidated financial data set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included herein. Our financial statements included in this Circular have been prepared in accordance with U.S. GAAP.

Amounts are expressed in thousands of dollars, except share and per share amounts.

For the Year Ended December 31,	2010		2009		2008		2007		2006	
STATEMENTS OF OPERATIONS										
Revenues	\$ 7,830	\$	4,371	\$	5,726	\$	9,108	\$	4,324	
Operating expenses	(22,481)	(22,114)	(33,202)	(42,176)	(22,005)
Interest expense	(19)	(107)	(97)	(134)	(172)
Interest income	101		188		982		1,101		655	
Loss on foreign exchange	(1)	(2)	(10)	(1)	(2)
Realized (loss)/gain on investment	(2,045)	851		(89)	-			