SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) of the SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): May 31, 2012

ATRICURE, INC.

(Exact name of registrant as specified in charter)

Delaware (State or other jurisdiction of incorporation) 000-51470 (Commission File Number) 34-1940305 (IRS Employer Identification No.)

6217 Centre Park Drive West Chester, OH (Address of principal executive offices)

45069 (Zip Code)

Registrant's telephone number, including area code: (513) 755-4100

Not Applicable

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Dere-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Dere-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01. Entry into a Material Definitive Agreement.

Effective May 31, 2012, AtriCure, Inc. (the "Company") and Silicon Valley Bank (the "Bank") entered into a Third Loan Modification Agreement (the "Loan Modification Agreement") which sets forth certain amendments to the Company's credit facility with the Bank.

The Loan Modification Agreement increases the Company's subsidiary investment limit from \$10,000,000 to \$12,000,000 from the effective date through September 30, 2012 and reduces the subsidiary investment limit back to \$10,000,000 thereafter.

The foregoing description of the Loan Modification Agreement is qualified in its entirety by the full text of the Loan Modification Agreement as attached to this Form 8-K as Exhibit 10.1.

Item 2.03. Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant.

The information provided in Item 1.01 of this Current Report on Form 8-K is incorporated by reference into this Item 2.03.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

No. Description

10.1 Third Loan Modification Agreement between Silicon Valley Bank and AtriCure, Inc. dated May 31, 2012

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ATRICURE, INC.

By: /s/ David J. Drachman

David J. Drachman President and Chief Executive Officer

Date: June 4, 2012

THIRD LOAN MODIFICATION AGREEMENT

This Third Loan Modification Agreement (this "Loan Modification Agreement") is entered into and effective as of May 31, 2012 (the "Third Loan Modification Effective Date"), by and between SILICON VALLEY BANK, a California corporation, with its principal place of business at 3003 Tasman Drive, Santa Clara, California 95054 and with a loan production office located at 380 Interlocken Crescent, Suite 600, Broomfield, Colorado 80021 ("Bank") and ATRICURE, INC., a Delaware corporation with its chief executive office located at 6217 Centre Park Drive, West Chester, Ohio 45069 ("Borrower").

1. DESCRIPTION OF EXISTING INDEBTEDNESS AND OBLIGATIONS. Among other indebtedness and obligations which may be owing by Borrower to Bank, Borrower is indebted to Bank pursuant to a loan arrangement dated as of September 13, 2010, evidenced by, among other documents, a certain Amended and Restated Loan and Security Agreement dated as of September 13, 2010, between Borrower and Bank, as further amended by a certain First Loan Modification Agreement entered into and effective as of March 15, 2011, and further amended by a certain Second Loan Modification Agreement, entered into and effective as of February 2, 2012 (as amended, the "Loan Agreement"). Capitalized terms used but not otherwise defined herein shall have the same meaning as in the Loan Agreement.

2. DESCRIPTION OF COLLATERAL. Repayment of the Obligations is secured by the Collateral as described (i) in the Loan Agreement; (ii) in a certain Export-Import Bank Loan and Security Agreement, dated as of September 13, 2010, as further amended by a certain Export-Import Bank First Loan Modification Agreement entered into and effective as of March 15, 2011 and as further amended by a certain Export-Import Bank Second Loan Modification Agreement, dated as of February 2, 2012 (as amended, the "EXIM Loan Agreement"); and (iii) in a certain Intellectual Property Security Agreement dated as of May 1, 2009 (the "IP Agreement", and together with any other collateral security granted to Bank, the "Security Documents").

Hereinafter, the Security Documents, together with the Existing Loan Agreement and all other documents evidencing or securing the Obligations shall be referred to as the "Existing Loan Documents".

3. DESCRIPTION OF CHANGE IN TERMS.

- A. Modifications to Loan Agreement.
 - 1 The Loan Agreement shall be amended by deleting the following text appearing as clause (g) of the definition of "Permitted Indebtedness" appearing in Section 13.1 thereof:

"(g) Indebtedness of Borrower to any Subsidiary, and Contingent Obligations of any Subsidiary with respect to obligations of Borrower (provided that the primary obligations are not prohibited hereby), and Indebtedness of Subsidiaries to Borrower that, when aggregated with Investments of Borrower in Subsidiaries that are permitted pursuant to the definition of "Permitted Investments" hereunder, does not exceed Ten Million Dollars (\$10,000,000) in the aggregate for all Subsidiaries (net of repayments by the Subsidiaries to Borrower) and Indebtedness of any Subsidiary to any other Subsidiary, and Contingent Obligations of any Subsidiary with respect to obligations of any other Subsidiary (provided that the primary obligations are not prohibited hereby);"

and inserting in lieu thereof the following:

"(g) Indebtedness of Borrower to any Subsidiary, and Contingent Obligations of any Subsidiary with respect to obligations of Borrower (provided that the primary obligations are not prohibited hereby), and Indebtedness of Subsidiaries to Borrower that, when aggregated with Investments of Borrower in Subsidiaries that are permitted pursuant to the definition of "Permitted Investments" hereunder, does not exceed (i) for the period commencing on the Third Loan Modification Effective Date through and including September 30, 2012, Twelve Million Dollars (\$12,000,000); and (ii) thereafter, Ten Million Dollars (\$10,000,000), in the aggregate for all Subsidiaries (net of repayments by the Subsidiaries to Borrower) and Indebtedness of any Subsidiary to any other Subsidiary, and Contingent Obligations of any Subsidiary with respect to obligations of any other Subsidiary (provided that the primary obligations are not prohibited hereby);"

2 The Loan Agreement shall be amended by deleting the following text appearing as clause (f) of the definition of "Permitted Investments" appearing in Section 13.1 thereof:

"(f) Investments (i) by Borrower in Subsidiaries that, when aggregated with Indebtedness of Subsidiaries to Borrower that is permitted pursuant to the definition of "Permitted Indebtedness" hereunder, do not exceed Ten Million Dollars (\$10,000,000) (or the Dollar equivalent thereof) in the aggregate for all Subsidiaries (net of repayment by the Subsidiaries to Borrower) and (ii) by Subsidiaries in Borrower;"

and inserting in lieu thereof the following:

"(f) Investments (i) by Borrower in Subsidiaries that, when aggregated with Indebtedness of Subsidiaries to Borrower that is permitted pursuant to the definition of "Permitted Indebtedness" hereunder, do not exceed (i) for the period commencing on the Third Loan Modification Effective Date through and including September 30, 2012, Twelve Million Dollars (\$12,000,000); and (ii) thereafter, Ten Million Dollars (\$10,000,000) (or in each case the Dollar equivalent thereof), in the aggregate for all Subsidiaries (net of repayment by the Subsidiaries to Borrower) and (ii) by Subsidiaries in Borrower;"

3 The Loan Agreement shall be amended by inserting the following definition in its appropriate alphabetical order in Section 13.1 thereof:

""Third Loan Modification Effective Date" is May 31, 2012."

4. <u>FEES</u>. Borrower shall reimburse Bank for all legal fees and expenses incurred in connection with the Existing Loan Documents and this Loan Modification Agreement.

5. <u>AUTHORIZATION TO FILE</u>. Borrower hereby authorizes Bank to file UCC financing statements without notice to Borrower, with all appropriate jurisdictions, as Bank deems appropriate, in order to further perfect or protect Bank's interest in the Collateral, including a notice that any disposition of the Collateral, by either the Borrower or any other Person, shall be deemed to violate the rights of the Bank under the Code.

6. <u>CONSISTENT CHANGES</u>. The Existing Loan Documents are hereby amended wherever necessary to reflect the changes described above.

7. <u>RATIFICATION OF LOAN DOCUMENTS</u>. Borrower hereby ratifies, confirms, and reaffirms all terms and conditions of all security or other collateral granted to the Bank, and confirms that the indebtedness secured thereby includes, without limitation, the Obligations.

8. <u>NO DEFENSES OF BORROWER</u>. Borrower hereby acknowledges and agrees that Borrower has no offsets, defenses, claims, or counterclaims against Bank with respect to the Obligations, or otherwise, and that if Borrower now has, or ever did have, any offsets, defenses, claims, or counterclaims against Bank, whether known or unknown, at law or in equity, all of them are hereby expressly WAIVED and Borrower hereby RELEASES Bank from any liability thereunder.

9. <u>CONTINUING VALIDITY</u>. Borrower understands and agrees that in modifying the existing Obligations, Bank is relying upon Borrower's representations, warranties, and agreements, as set forth in the Existing Loan Documents. Except as expressly modified pursuant to this Loan Modification Agreement, the terms of the Existing Loan Documents remain unchanged and in full force and effect. Bank's agreement to modifications to the existing Obligations pursuant to this Loan Modification Agreement in no way shall obligate Bank to make any future modifications to the Obligations. Nothing in this Loan Modification Agreement shall constitute a satisfaction of the Obligations. It is the intention of Bank and Borrower to retain as liable parties all makers of Existing Loan Documents, unless the party is expressly released by Bank in writing. No maker will be released by virtue of this Loan Modification Agreement.

10. <u>RIGHT OF SET-OFF</u>. In consideration of Bank's agreement to enter into this Loan Modification Agreement, Borrower hereby reaffirms and hereby grants to Bank, a lien, security interest and right of set off as security for all Obligations to Bank, whether now existing or hereafter arising upon and against all deposits, credits, collateral and property, now or hereafter in the possession, custody, safekeeping or control of Bank or any entity under the control of Silicon Valley Bank (including a Bank subsidiary) or in transit to any of them. At any time after the occurrence and during the continuance of an Event of Default, without demand or notice, Bank may set off the same or any part thereof and apply the same to any liability or obligation of Borrower even though unmatured and regardless of the adequacy of any other collateral securing the loan. ANY AND ALL RIGHTS TO REQUIRE BANK TO EXERCISE ITS RIGHTS OR REMEDIES WITH RESPECT TO ANY OTHER COLLATERAL WHICH SECURES THE OBLIGATIONS, PRIOR TO EXERCISING ITS RIGHT OF SETOFF WITH RESPECT TO SUCH DEPOSITS, CREDITS OR OTHER PROPERTY OF BORROWER, ARE HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVED.

11. <u>CONFIDENTIALITY</u>. Without limiting Section 12.10 of the Loan Agreement (which is and shall remain in full force and effect), Bank may use confidential information for the development of databases, reporting purposes, and market analysis, so long as such confidential information is aggregated and anonymized prior to distribution unless otherwise expressly permitted by Borrower. The provisions of the immediately preceding sentence shall survive the termination of the Loan Agreement.

12. <u>JURISDICTION/VENUE</u>. California law governs the Loan Documents, including, without limitation, this Loan Modification Agreement without regard to principles of conflicts of law. Borrower and Bank each submit to the exclusive jurisdiction of the State and Federal courts in Santa Clara County, California; provided, however, that nothing in this Agreement shall be deemed to operate to preclude Bank from bringing suit or taking other legal action in any other expressly submits and consents in advance to such jurisdiction in any action or suit commenced in any such court, and Borrower hereby waives any objection that it may have based upon lack of personal jurisdiction, improper venue, or forum non conveniens and hereby consents to the granting of such legal or equitable relief as is deemed appropriate by such court. Borrower hereby waives personal service of the summons, complaints, and other process may be made by registered or certified mail addressed to Borrower at the address set forth in, or subsequently provided by Borrower in accordance with, Section 10 of the Loan Agreement and that service so made shall be deemed completed upon the earlier to occur of Borrower's actual receipt thereof or three (3) days after deposit in the U.S. mails, proper postage prepaid.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, BORROWER AND BANK EACH WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF OR BASED UPON THIS LOAN MODIFICATION AGREEMENT, THE LOAN AGREEMENT, THE LOAN DOCUMENTS OR ANY CONTEMPLATED TRANSACTION, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR BOTH PARTIES TO ENTER INTO THIS AGREEMENT. EACH PARTY HAS REVIEWED THIS WAIVER WITH ITS COUNSEL.

WITHOUT INTENDING IN ANY WAY TO LIMIT THE PARTIES' AGREEMENT TO WAIVE THEIR RESPECTIVE RIGHT TO A TRIAL BY JURY, if the above waiver of the right to a trial by jury is not enforceable, the parties hereto agree that any and all disputes or controversies of any nature between them arising at any time shall be decided by a reference to a private judge, mutually selected by the parties (or, if they cannot agree, by the Presiding Judge of the Santa Clara County, California Superior Court) appointed in accordance with California Code of Civil Procedure Section 638 (or pursuant to comparable provisions of federal law if the dispute falls within the exclusive jurisdiction of the federal courts), sitting without a jury, in Santa Clara County, California; and the parties hereby submit to the jurisdiction of such court. The reference proceedings shall be conducted pursuant to and in accordance with the provisions of California Code of Civil Procedure §§ 638 through 645.1, inclusive. The private judge shall have the power, among others, to grant provisional relief, including without limitation, entering temporary restraining orders, issuing preliminary and permanent injunctions and appointing receivers. All such proceedings shall be closed to the public and confidential and all records relating thereto shall be permanently sealed. If during the course of any dispute, a party desires to seek provisional relief, but a judge has not been appointed at that point pursuant to the judicial reference procedures, then such party may apply to the Santa Clara County, California Superior Court for such relief. The proceeding before the private judge shall be conducted in the same manner as it would be before a court under the rules of evidence applicable to judicial proceedings. The parties shall be entitled to discovery which shall be conducted in the same manner as it would be before a court under the rules of discovery applicable to judicial proceedings. The private judge shall oversee discovery and may enforce all discovery rules and orders applicable to judicial proceedings in the same manner as a trial court judge. The parties agree that the selected or appointed private judge shall have the power to decide all issues in the action or proceeding, whether of fact or of law, and shall report a statement of decision thereon pursuant to California Code of Civil Procedure § 644(a). Nothing in this paragraph shall limit the right of any party at any time to exercise self-help remedies, foreclose against collateral, or obtain provisional remedies

The private judge shall also determine all issues relating to the applicability, interpretation, and enforceability of this paragraph.

13. COUNTERSIGNATURE. This Loan Modification Agreement shall become effective only when it shall have been executed by Borrower and Bank.

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This Loan Modification Agreement is executed as of the Third Loan Modification Effective Date.

BORROWER:

ATRICURE, INC.

By: /s/ David Drachman Name: David Drachman Title: President and Chief Executive Officer BANK:

SILICON VALLEY BANK

By: /s/ Tom Hertzberg Name: Tom Hertzberg Title: Relationship Manager