SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

SCHEDULE 13D (Rule 13d-101)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULE 13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT TO RULE 13d-2(a)

METRON TECHNOLOGY N.V.
(Name of Issuer)
Common Shares, par value € 0.44 per share
(Title of Class of Securities)
N5665B105
(CUSIP Number)
Entegris, Inc. 3500 Lyman Boulevard Chaska, MN 55318 (952) 556-3131

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

August 16, 2004

(Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g)), check the following box \boxtimes .

Note. Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. *See* Rule 13d-7 for other parties to whom copies are to be sent.

(Continued on following pages)

CUSIP No. N5665B10	5 13D	Page 2 of 7 Pages
	DRTING PERSONS	
I.R.S. IDENTIFIC (ENTITIES ONLY	ATION NOS. OF ABOVE PERSONS	
Entegr FEIN 4	ıs, Inc. 11-1941551	
	PROPRIATE BOX IF A MEMBER OF A GROUP:	
(a) □		
(b) \square 3 SEC USE ONLY		
	IDC*	
4 SOURCE OF FUN	ND5*	
PF	NIGH OCUPE OF LEGAL PROCEEDINGS IS REQUIRED NURSUANTE TO ITEM OCIDED OC	
5 CHECK BOX IF I	DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e):	
6 CITIZENSHIP OF	R PLACE OF ORGANIZATION:	
United	States	
	7 SOLE VOTING POWER:	
	0	
NUMBER OF SHARES BENEFICIALLY OWNED BY	8 SHARED VOTING POWER:	
	1,052,887	
EACH REPORTING	9 SOLE DISPOSITIVE POWER:	
PERSON WITH	0	
	10 SHARED DISPOSITIVE POWER:	
	1,052,887	
11 AGGREGATE AM	MOUNT BENEFICIALLY OWNED BY REPORTING PERSON:	
1,052,8	87	
12 CHECK BOX IF	THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES:	
13 PERCENT OF CL	ASS REPRESENTED BY AMOUNT IN ROW (11):	
8.2%		
14 TYPE OF REPOR	TING PERSON:	
CO		

Item 1. Security and Issuer

This statement on Schedule 13D (this "Statement") relates to the common shares, par value € 0.44 per share ("Common Shares"), of Metron Technology N.V., a company organized under the laws of The Netherlands ("Metron" or "Issuer"). The principal executive offices of Metron are located at 4425 Fortran Drive, San Jose, California 95134.

Item 2. Identity and Background

The name of the entity filing this Statement is Entegris, Inc., a Minnesota corporation. Entegris, Inc.'s principal business address is 3500 Lyman Boulevard, Chaska, MN 55318. Its principal business is the manufacture of products used primarily by the semiconductor and data storage industries. During the past five years, Entegris, Inc. has not been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) and has not been a party to civil proceedings of a judicial or administrative body of competent jurisdiction as a result of which Entegris, Inc. was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration

Entegris, Inc. has been the beneficial owner and record holder of shares of Metron common shares since Metron's initial public offering in November 1999, prior to which Entegris, Inc. held common shares of Metron as a founding shareholder. With respect to such ownership Entegris, Inc. has previously filed a Schedule 13G, pursuant to Rule 13d-1(d).

The Voting Agreement and Proxy described in Item 4 of this Schedule 13D (the terms of which are hereby incorporated by reference) was entered into by Entegris, Inc. and Applied Materials, Inc., a Delaware corporation ("Applied") as an inducement to Applied to enter into the Purchase Agreement described in Item 4 of this Statement. Entegris, Inc. did not receive additional consideration from Applied in connection with the execution and delivery of the Voting Agreement and Proxy. In addition, Entegris, Inc. granted Applied an irrevocable proxy for the purpose of voting the shares of Metron common shares covered by the Voting Agreement and Proxy.

Item 4. Purpose of Transaction

(a) – (c) This filing on Schedule 13D has been made because Entegris, Inc. has entered into a Voting Agreement and Proxy with Applied as an inducement to Applied to enter into the Purchase Agreement (as described below), and thus Entegris, Inc. may be deemed to hold shares of Metron common shares with a purpose or effect of changing or influencing control of Metron. Entegris, Inc., however, does not concede that it holds shares of Metron common shares with such a purpose or effect.

Pursuant to a Stock and Asset Purchase Agreement, dated as of August 16, 2004, by and between Applied and Metron (the "Purchase Agreement"), upon the terms and subject to the conditions set forth therein (including adoption and approval of the transactions contemplated thereby by the shareholders of Metron and receipt of applicable regulatory approvals), Metron will sell and assign, and Applied will purchase and assume, substantially all of Metron's assets and liabilities (the "Transaction").

In connection with the Purchase Agreement, in order to induce Applied to enter into the Purchase Agreement, Applied and certain shareholders of Metron (the "Shareholders"), including Entegris, Inc., entered into Voting Agreement and Proxies, dated August 16, 2004 (the "Voting Agreements"). Pursuant to the Voting Agreements, each of the Shareholders, including Entegris, Inc., irrevocably appointed the directors of Applied as such Shareholder's lawful attorneys and proxies with respect to certain prescribed

matters related to the Transaction. The foregoing proxies provide the directors of Applied the limited right to vote or deliver a consent with respect to each of the shares of Metron common shares beneficially owned by the Shareholders, at every meeting of the shareholders of Metron, and at every adjournment thereof, and in every action or approval by written consent of the shareholders of Metron in lieu of such a meeting with respect to any of the following: (i) in favor of the adoption and approval of (x) the Purchase Agreement, the Transaction and the other matters contemplated by the Purchase Agreement, (y) any matter in furtherance of the Transaction and any of the other transactions contemplated by the Purchase Agreement and the Voting Agreements, and (z) the waiver of any notice to Shareholder that may have been or may be required relating to the Transaction or any of the other transactions contemplated by the Purchase Agreement or the Voting Agreements, and (ii) against any (x) Company Takeover Proposal (as defined in the Purchase Agreement) made by any person other than Applied, without regard to any recommendation from Metron's Boards of Directors to shareholders concerning such Company Takeover Proposal, and without regard to the terms of such Company Takeover Proposal, (y) any agreement, amendment of any agreement (including Metron's articles of association or other organizational documents), or any other action that is intended or could reasonably be expected to prevent, impede, interfere with, delay, postpone, or discourage the Transaction and any of the other transactions contemplated by the Purchase Agreement or the Voting Agreements, and (z) any action, agreement, transaction or proposal that would result in a material breach of any representation, warranty, covenant, agreement or other obligation of Metron, the Purchased Companies or their Subsidiaries (each as defined in the Purchase Agreement) in the Purchase Agreement.

A copy of the Voting Agreement and Proxy by and between Entegris, Inc. and Applied Materials, Inc. is attached hereto as Exhibit 2.1 and the description of the Voting Agreements contained herein is qualified in its entirety by reference to Exhibit 2.1, which is incorporated herein by reference.

- (d) Other than as described in this Schedule 13D, not applicable.
- (e) (f) The Purchase Agreement restricts Metron from, among other matters, engaging in certain transactions, including extraordinary corporate transactions (other than the Transaction), making acquisitions, selling assets, incurring indebtedness, changing its capitalization and paying dividends and otherwise requires Metron to operate in the ordinary course of business.
- (g) Not applicable.
- (h) As soon as practicable following the consummation of the Transaction, Metron intends to wind up its affairs, including delisting its securities from NASDAQ, liquidating and dissolving.
- (i) As soon as practicable following the consummation of the Transaction, Metron intends to wind up its affairs, including delisting its securities from NASDAQ, liquidating and dissolving.
- (j) Other than as described in this Schedule 13D, not applicable.

Item 5. Interest in Securities of the Issuer

(a) – (b) As a result of the Voting Agreement and Proxy, Entegris, Inc. has shared power to vote an aggregate of 1,052,887¹ shares of Metron common shares and has agreed with Applied that Entegris, Inc. will vote its shares of Metron common shares as described in item 4 above. The Voting Agreement and Proxy also provides that Entegris, Inc. will not to transfer its shares of Metron common shares, except in limited circumstances. The aggregate number of shares of Metron common shares which Entegris, Inc. has the shared power to be voted as described in Item 4 above constitutes approximately 8.2% of the issued and outstanding shares of Metron common shares as of July 31, 2004, which, according to Metron's Annual Report on Form 10-K as filed on August 12, 2004, was 12,831,996.

Consists of 1,052,887 shares held by Entegris, Inc.

Except as set forth in this Schedule 13D, Entegris, Inc. does not beneficially own any shares of Metron common shares. Entegris, Inc.'s principal business address is 3500 Lyman Boulevard, Chaska, MN 55318. Its principal business is the manufacture of products used primarily by the semiconductor and data storage industries. During the past five years, Entegris, Inc. has not been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) and has not been a party to civil proceedings of a judicial or administrative body of competent jurisdiction as a result of which Entegris, Inc. was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

- (c) Entegris, Inc. has not affected any transaction in Metron common shares during the past 60 days, except as disclosed herein.
- (d) Not applicable.
- (e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Other than the Voting Agreement and Proxy, there are no contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the issuer, including but not limited to transfer or voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies.

Item 7. Material To Be Filed As Exhibits

NO.	DESCRIPTION
2.1	Voting Agreement and Proxy dated as of August 16, 2004 by and between Entegris, Inc. and Applied Materials, Inc.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: August 26, 2004 ENTEGRIS, INC.

By: /s/ John D. Villas

John D. Villas

Chief Financial Officer

EXHIBIT INDEX

EXHIBIT NO. DESCRIPTION

2.1 Voting Agreement and Proxy dated as of August 16, 2004 by and between Entegris, Inc. and Applied Materials, Inc.

VOTING AGREEMENT AND PROXY

This VOTING AGREEMENT AND PROXY (this "*Agreement*") is dated as of August 16, 2004 by and between Entegris, Inc., a Minnesota corporation ("*Shareholder*") and Applied Materials, Inc., a Delaware corporation ("*Purchaser*").

RECITALS:

- A. Concurrently herewith, Purchaser and Metron Technology N.V., a corporation organized under the laws of The Netherlands (the "Company") have entered into a Stock and Asset Purchase Agreement (as amended from time to time, the "Purchase Agreement"). Shareholder acknowledges receipt of a copy of the Purchase Agreement. Unless otherwise defined herein, capitalized terms used herein have the meanings ascribed to such terms in the Purchase Agreement.
- B. The Purchase Agreement provides for, among other matters the sale by the Company to Purchaser of the Purchased Assets which includes the Business which operates through the ownership of all of the issued and outstanding shares of capital stock of the Purchased Companies.
- C. Following the completion of the Transaction, the Company intends to wind up its affairs, satisfy all valid claims of creditors and others having claims against the Company and distribute any remaining assets to its shareholders.
- D. As of the date hereof, Shareholder is the record and beneficial owner of that number of common shares, par value 0.44 Euro per share (calculated as permitted by Section 2:67c of the Dutch Civil Code), of the Company set forth the signature page hereto (such shares, together with any other capital stock of the Company acquired by Shareholder after the date hereof, being collectively referred to herein as the "Shares").
 - E. The Company Shareholder Approval (as defined in the Purchase Agreement) is a condition to the consummation of the Transaction.
 - F. As an inducement to Purchaser to enter into the Purchase Agreement, Purchaser and Shareholder have agreed to enter into this Agreement.
- NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements hereinafter contained, the parties hereby agree as follows: Section 1. *No Shop*
- (a) *General*. So long as this Agreement remains in effect, Shareholder shall not, nor shall it authorize or permit any of Shareholder's Affiliates, any of their respective directors, officers or employees or any investment banker, financial advisor, attorney, accountant or other advisor, agent or representative (collectively, "*Representatives*") retained by Shareholder to, directly or indirectly through another Person, (i) solicit, initiate or knowingly encourage, or take any other action intended to, or which could reasonably be expected to facilitate, any inquiries or the making of any proposal that constitutes or is reasonably likely to lead to a Company Takeover Proposal (as defined in the Purchase Agreement)or (ii) participate in any discussions or negotiations regarding, or furnish to any person any information, or otherwise cooperate in any way with, any Company Takeover Proposal.
- (b) *Notification*. So long as this Agreement remains in effect, Shareholder shall promptly (but in any event within 24 hours of receipt thereof) advise Purchaser orally and in writing of any Company Takeover Proposal or request for information received by Shareholder that would reasonably be expected to lead to or contemplates any Company Takeover Proposal, or any inquiry that would reasonably be expected to lead to any Company Takeover Proposal, the terms and conditions of any such request, Company Takeover Proposal or inquiry (including any changes thereto) and the identity of the person making any such request, Company Takeover Proposal or inquiry, with a copy of any written Company

Takeover Proposal or inquiry. Shareholder shall (i) keep Purchaser informed of the status and details (including any change to the terms thereof) of any such request, Company Takeover Proposal or inquiry and (ii) provide to Purchaser as soon as practicable after receipt or delivery thereof with copies of all correspondence and other written material (or a written summary of any oral request. Company Takeover Proposal or inquiry) sent or provided to Shareholder from any person that describes any of the terms or conditions of any such request, Company Takeover Proposal or inquiry. Shareholder shall be deemed to have satisfied the notice requirement of this Section 1(b) if notices containing the information described herein are delivered by the Company in accordance with Section 6.6(c) of the Purchase Agreement.

- (c) Ongoing Discussions. Shareholder shall (and shall cause its Representatives to) immediately cease and cause to be terminated any existing discussions or negotiations with any Person conducted heretofore with respect to any Company Takeover Proposal and request the prompt return or destruction of all confidential information previously furnished by Shareholder.
- (d) *Fiduciary Duties*. This *Section 1* shall not apply to any action taken by Shareholder in Shareholder's the capacity as either an officer or director of the Company and any actions taken by Shareholder in such capacity shall be governed solely by the Purchase Agreement.
 - Section 2. Agreement to Vote, Restrictions on Voting and Dispositions, Irrevocable Proxy.
- (a) Agreement to Vote. At every meeting of the shareholders of the Company called with respect to any of the following, and at every adjournment thereof, and in every action or approval by written consent of the shareholders of the Company in lieu of such a meeting with respect to any of the following, Shareholder shall vote or cause to be voted the Shares, and shall execute and deliver written consents and otherwise exercise all voting and other rights of Shareholder with respect to the Shares (i) in favor of adoption and approval of (x) the Purchase Agreement, the Transaction and the other matters contemplated by the Purchase Agreement, (y) any matter in furtherance of the Transaction and any of the other transactions contemplated by the Purchase Agreement and this Agreement, and (z) the waiver of any notice to Shareholder that may have been or may be required relating to the Transaction or any of the other transactions contemplated by the Purchase Agreement or this Agreement, and (ii) against any (x) Company Takeover Proposal made by any Person other than the Purchaser, without regard to any recommendation from the Company Boards to shareholders concerning such Company Takeover Proposal, and without regard to the terms of such Company Takeover Proposal, (y) any agreement, amendment of any agreement (including the Company's articles of association or other organizational documents), or any other action that is intended or could reasonably be expected to prevent, impede, interfere with, delay, postpone, or discourage the Transaction and any of the other transactions contemplated by the Purchase Agreement or this Agreement, and (z) any action, agreement, transaction or proposal that would result in a material breach of any representation, warranty, covenant, agreement or other obligation of the Company, the Purchased Companies or their Subsidiaries in the Purchase Agreement. Any such vote shall be cast (or consent shall be given) by Shareholder in accordance with the procedures relating thereto so as to ensure
- (b) *Restrictions on Dispositions*. Shareholder hereby agrees that, without the prior written consent of Purchaser (except as may be specifically required by Order or applicable Law), Shareholder shall not, directly or indirectly, sell, offer to sell, give, pledge, encumber, assign, grant any option for the sale of or otherwise transfer or dispose of, or enter into any agreement, arrangement or understanding to sell, any Shares (collectively, "*Transfer*") other than to its Affiliates, provided that as a condition to such Transfer, such Affiliate shall execute an agreement that is identical to this Agreement (except to reflect the change of the Shareholder).
- (c) *Irrevocable Proxy*. Concurrently with the execution of this Agreement, Shareholder shall deliver to Purchaser a duly executed proxy in the form attached hereto as *Exhibit A* (the "*Proxy*") with respect to each meeting of Company shareholders, such Proxy to cover the total number of Shares in respect of which Shareholder is entitled to vote at any such meeting. Upon the execution of this Agreement by Shareholder, Shareholder hereby revokes any and all prior proxies given by Shareholder with respect to the Shares and agrees not to grant any subsequent proxies with respect to the Shares (other than the Proxy) until after the Expiration.

- (d) *Inconsistent Agreements*. Shareholder hereby agrees that, it shall not enter into any agreement, contract or understanding with any Person prior to the Expiration directly or indirectly to vote, grant a proxy or power of attorney or give instructions with respect to the voting of the Shares in any manner which is inconsistent with this Agreement.
- (e) *Permitted Transfers. Section 2(b)* shall not prohibit a transfer of Shares by Shareholder if Shareholder is an individual upon the death of Shareholder; *provided, however*, that a transfer referred to in this sentence shall be permitted only if, as a precondition to such transfer, the transferee agrees in a writing, reasonably satisfactory in form and substance to Purchaser, to be bound by all of the terms of this Agreement.

Section 3. Non-disclosure. From and after the date hereof, Shareholder shall not and shall cause its Representatives not to, directly or indirectly, disclose, reveal, divulge or communicate to any Person other than authorized officers, directors and employees of Purchaser or the Company or use or otherwise exploit for his or its own benefit or for the benefit of anyone other than the Purchaser or the Company, any Confidential Information (as defined below). Shareholder and its Representatives shall not have any obligation to keep confidential any Confidential Information if, and to the extent, disclosure thereof is specifically required by law; provided, however, Shareholder shall provide Purchaser with prompt notice of such requirement prior to making any disclosure so that Purchaser may seek an appropriate protective order. For purposes of this Section 3(c), "Confidential Information" shall mean any confidential information (whether or not in writing) with respect to the Purchase Agreement, any of the transactions contemplated thereby, and the Company, the Purchased Companies or their Subsidiaries, including, methods of operation, customers, customer lists, products, prices, fees, cost, technology, inventions, trade secrets, know-how, software, marketing methods, plans, personnel, suppliers, competitors, markets, other specialized information or proprietary matters (including, without limitation, information that was or will be developed, created, discovered by or on behalf of the Company, the Purchased Companies or their Subsidiaries or will become known by, or was or is conveyed to the Company, the Purchased Companies or their Subsidiaries or their Subsidiaries or their Subsidiaries or will become known by, or was or is conveyed to the Company, the Purchased Companies or their Subsidiaries o

Section 4. Representations, and Warranties and Covenants of Shareholder. Shareholder represents and warrants to Purchaser as follows: (i) Shareholder has all necessary power and authority to execute and deliver this Agreement and to perform Shareholder's obligations hereunder; (ii) this Agreement has been duly executed and delivered by Shareholder and the execution, delivery and performance of this Agreement by Shareholder and the consummation of the transactions contemplated hereby have been duly authorized by all necessary corporate action on the part of Shareholder; (iii) assuming the due authorization, execution and delivery of this Agreement by Purchaser, this Agreement constitutes the valid and binding agreement of Shareholder enforceable against Shareholder in accordance with its terms, except as may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting the enforcement of creditors rights generally and subject to general equitable principles and to limitation on availability of equitable relief, including specific performance; (iv) the execution and delivery of this Agreement by Shareholder does not conflict with or violate any Law or agreement binding upon Shareholder, nor require any consent, notification, regulatory filing or approval, to any Person and (v) except for restrictions in favor of Purchaser pursuant to this Agreement and except for such transfer restrictions of general applicability as may be provided under the Securities Act of 1933, as amended, the "blue sky" laws of the various States of the United States, and any similar laws or other restrictions or limitations which may applicable under the laws of The Netherlands, Shareholder owns, beneficially and of record, all of the Shares free and clear of any proxy, voting restriction, adverse claim or other lien and has sole voting power and sole power of disposition with respect to all Shares, with no restrictions on Shareholder's rights of voting or disposition pertaining th

Section 5. *Representations and Warranties of Purchaser*. Purchaser represents and warrants to Shareholder as follows: (i) each of this Agreement and the Purchase Agreement has been approved by Purchaser's board of directors; (ii) each of this Agreement and the Purchase Agreement has been duly executed and delivered by a duly authorized officer of Purchaser; and (iii) assuming the due authorization,

execution and delivery of this Agreement by Shareholder, this Agreement constitutes a valid and binding agreement of Purchaser, enforceable against Purchaser in accordance with its terms, except as may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting the enforcement of creditors rights generally and subject to general equitable principles and to limitation on availability of equitable relief, including specific performance.

Section 6. *Further Assurances*. Each party hereto shall execute and deliver such additional instruments and other documents and shall take such further actions (including without limitation, in the case of the Shareholder, any amendments to this Agreement which Purchaser may reasonably request) as may be necessary or appropriate to effectuate, carry out and comply with all of his or its obligations under this Agreement.

Section 7. Effectiveness and Termination.

(a) It is a condition precedent to the effectiveness of this Agreement that the Purchase Agreement shall have been duly executed and delivered by each of the parties thereto and be in full force and effect. This Agreement shall automatically terminate and be of no further force or effect upon the earlier to occur of (i) such date and time as the Transaction shall become effective in accordance with the terms and provisions of the Purchase Agreement and (ii) the date of termination of the Purchase Agreement pursuant to its terms (the "Expiration").

Section 8. Miscellaneous.

- (a) Expenses. Each party shall bear his or its own expenses incurred in connection with this Agreement and the transactions contemplated hereby.
- (ii) Notices. All notices and other communications under this Agreement shall be in writing and shall be deemed given (i) when delivered personally. (ii) on the third business day after being mailed by certified mail, return receipt requested, (iii) the next business day after delivery to a recognized overnight courier, or (iv) upon transmission and confirmation of receipt by a facsimile operator if sent by facsimile (and shall also be transmitted by facsimile to the Persons receiving copies thereof), to the parties at the following addresses or facsimile numbers (or to such other address and facsimile number as a party may have specified by notice given to the other party pursuant to this provision):

If to Purchaser, to

Applied Materials, Inc. 2881 Scott Boulevard, M/S 2064 PO Box 58039 Santa Clara, CA 95050 Attention: Joseph J. Sweeney Facsimile No.: (408) 563-4635

and

Applied Materials, Inc. 3050 Bowers Avenue, M/S 0105 PO Box 58039 Santa Clara, CA 95054 Attention: Jim Pursiano Facsimile No.: (408) 986-7260

with a copy to (which shall not constitute notice):

Weil, Gotshal & Manges, LLP 201 Redwood Shores Parkway Redwood Shores, California 94065 Facsimile: (650) 802-3100

Attention: Richard S. Millard, Esq.

If to any Shareholder, to the address for notice set forth on the signature pages hereto, with a copy to (which shall not constitute notice):

Cooley Godward LLP 5 Palo Alto Square 3000 El Camino Real Palo Alto, CA 94306

Attention: Suzanne Sawochka Hooper, Esq.

(c) Amendments, Waivers, Etc. This Agreement may not be amended, changed, supplemented, waived or otherwise modified or terminated except by an instrument in writing signed by Purchaser and Shareholder.

- (d) *Successors and Assigns*. No party may assign any of its or his rights or delegate any of its or his obligations under this Agreement without the prior written consent of the other parties, except that Purchaser may, without the consent of Shareholder, assign any of its rights and delegate any of its obligations under this Agreement to any Affiliate of Purchaser. Subject to the preceding sentence, this Agreement shall be binding upon and shall inure to the benefit of and be enforceable by the parties and their respective successors and assigns, including without limitation any corporate successor by merger or otherwise. Notwithstanding any Transfer of Shares consistent with this Agreement, the transferor shall remain liable for the performance of all obligations of transferor under this Agreement.
- (e) *No Third Party Beneficiaries*. Nothing expressed or referred to in this Agreement will be construed to give any Person, other than the parties to this Agreement, any legal or equitable right, remedy or claim under or with respect to this Agreement or any provision of this Agreement except as such rights as may inure to a successor or permitted assignee under *Section 8(d)*.
- (f) *No Partnership, Agency, or Joint Venture*. This Agreement is intended to create, and creates, a contractual relationship and is not intended to create, and does not create, any agency, partnership, joint venture or any like relationship between the parties hereto.
- (g) *Entire Agreement*. This Agreement embodies the entire agreement and understanding among the parties relating to the subject matter hereof and supersedes all prior agreements and understandings relating to such subject matter other than the Purchase Agreement and any other agreement, document or instrument expressly referenced therein.
- (h) *Severability*. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or unenforceability of any other provisions of this Agreement.
- (i) Specific Performance; Remedies Cumulative. The parties hereto acknowledge that money damages are not an adequate remedy for violations of this Agreement and that any party, in addition to any other rights and remedies which the parties may have hereunder or at law or in equity, may, in his or its sole discretion, apply to a court of competent jurisdiction for specific performance or injunction or such other relief as such court may deem just and proper in order to enforce this Agreement or prevent any violation hereof and, to the extent permitted by applicable law, each party waives any objection to the imposition of such relief. All rights, powers and remedies provided under this Agreement or otherwise available in respect hereof at law or in equity shall be cumulative and not alternative, and the exercise or beginning of the exercise of any thereof by any party shall not preclude the simultaneous or later exercise of any other such rights, powers or remedies by such party.
- (j) No Waiver. The failure of any party hereto to exercise any right, power or remedy provided under this Agreement or otherwise available in respect hereof at law or in equity, or to insist upon compliance by any other party hereto with his or its obligations hereunder, and any custom or practice of the parties at variance with the terms hereof, shall not constitute a waiver by such party of his or its right to exercise any such or other right, power or remedy or to demand such compliance.

- (k) *Governing Law.* Except for the proxy contemplated by *Section 2(c)* (which shall be governed by the laws of The Netherlands), this Agreement shall be governed by and construed in accordance with the laws of the State of California without giving effect to the principles of conflict of laws thereof.
- (l) *Jurisdiction*. The parties hereto hereby irrevocably submit to the non-exclusive jurisdiction of any federal or state court located within the County of Santa Clara in the State of California over any dispute arising out of or relating to this Agreement or any of the transactions contemplated hereby and each party hereby irrevocably agrees that all claims in respect of such dispute or any suit, action proceeding related thereto may be heard and determined in such courts. The parties hereby irrevocably waive, to the fullest extent permitted by applicable law, any objection which they may now or hereafter have to the laying of venue of any such dispute brought in such court or any defense of inconvenient forum for the maintenance of such dispute. Each of the parties hereto agrees that a judgment in any such dispute may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Each of the parties hereto hereby consents to process being served by any party to this Agreement in any suit, action or proceeding by the mailing of a copy thereof in accordance with the provisions of *Section 8(b)*.
- (m) Waiver of Jury Trial. Shareholder hereby waives, to the fullest extent permitted by applicable law, any right it may have to a trial by jury in respect of any litigation directly or indirectly arising out of, under or in connection with this Agreement. Shareholder (i) certifies that no representative of any other party has represented, expressly or otherwise, that such other party would not, in the event of any such litigation, seek to enforce the foregoing waiver and (ii) acknowledges that it has been induced to enter into this Agreement by, among other things, the consideration to be received by the Company and its creditors and shareholders, including Shareholder, in connection with the consummation of the Transaction and the other matters contemplated by the Purchase Agreement.
- (n) *Drafting and Representation*. The parties have participated jointly in the negotiation and drafting of this Agreement. No provision of this Agreement will be interpreted for or against any party because that party or his or its legal representative drafted the provision.
- (o) *Name, Captions, Gender.* Section headings of this Agreement are for reference purposes only and are to be given no effect in the construction or interpretation of this Agreement. Whenever the context may require, any pronoun used herein shall include the corresponding masculine, feminine or neuter forms.
- (p) *Counterparts*. This Agreement may be executed by facsimile and in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one instrument. Each counterpart may consist of a number of copies each signed by less than all, but together signed by all, the parties hereto.

IN WITNESS WHEREOF, the parties hereto have duly executed and delivered this Agreement as of the date and year first written above.

Applied Materials, Inc., a Delaware corporation

By: /s/ Michael R. Splinter

Name: Michael R. Splinter Title: President and CEO

SHAREHOLDER: Entegris, Inc.

Signature: /s/ John D. Villas

Address: 3500 Lyman Boulevard

Chaska, MN 55318

Facsimile: 952-556-8644 Attention: John Villas Number of Shares Held: Common Stock 1,052,887

Exhibit A

IRREVOCABLE PROXY TO VOTE STOCK OF METRON TECHNOLOGY N.V.

The undersigned shareholder of Metron Technology N.V., a corporation organized under the law of The Netherlands ("Company"), hereby irrevocably (to the full extent permitted by applicable law) appoints the members of the Board of Directors of Applied Materials, Inc., a Delaware corporation ("Purchaser"), and each of them, or any other designee of Purchaser, as the sole and exclusive attorneys and proxies of the undersigned, with full power of substitution and resubstitution, to vote and exercise all voting and related rights (to the full extent that the undersigned is entitled to do so) with respect to all of the shares of capital stock of Company that now are or hereafter may be beneficially owned by the undersigned, or as to which the undersigned now or hereafter exercises voting control, and any and all other shares or securities of Company issued or issuable in respect thereof, or otherwise acquired by the undersigned on or after the date hereof (collectively, the "Shares") in accordance with the terms of this Irrevocable Proxy. The Shares beneficially owned by the undersigned shareholder of Company as of the date of this Irrevocable Proxy are listed on the final page of this Irrevocable Proxy. Upon the undersigned's execution of this Irrevocable Proxy, any and all prior proxies given by the undersigned with respect to any Shares are hereby revoked and the undersigned agrees not to grant any subsequent proxies with respect to the Shares until after the Expiration (as defined below).

This Irrevocable Proxy is irrevocable (to the extent provided under law), is coupled with an interest, and is granted pursuant to that certain Voting and Proxy Agreement dated as of even date herewith by and between Purchaser and the undersigned, and is granted in consideration of Purchaser's entering into that certain Stock and Asset Purchase Agreement by and among Purchaser and the Company (the "Purchase Agreement"), which agreement provides for, among other matters, the sale by the Company to Purchaser of the Purchased Assets which includes the Company's business of marketing, sales, service and support solutions to semiconductor materials and equipment suppliers and semiconductor manufacturers and the marketing, sale, manufacture and support of early generation semiconductor equipment which operates through the ownership of all of the issued and outstanding shares of capital stock of the Purchased Companies the acquisition by the Purchaser of certain assets of the Company (the "Transaction").

As used herein, the term "Expiration" shall mean the earlier to occur of (i) such date and time as the Transaction shall become effective in accordance with the terms and provisions of the Purchase Agreement, and (ii) the date of termination of the Purchase Agreement pursuant to its terms. This Irrevocable Proxy shall terminate at and as of the Expiration.

The attorneys and proxies named above, and each of them are hereby authorized and empowered by the undersigned, at any time prior to the Expiration, to act as the undersigned's attorney and proxy to vote the Shares, and to exercise all voting and other rights of the undersigned with respect to the Shares (including, without limitation, the power to execute and deliver written consents), at every annual, special or adjourned meeting of the shareholders of Company and in every action or approval by written consent in lieu of such meeting as follows:(i) in favor of adoption and approval of (x) the Purchase Agreement, the Transaction and the other matters contemplated by the Purchase Agreement, (y) any matter in furtherance of the Transaction and any of the other transactions contemplated by the Purchase Agreement and this Agreement, and (z) the waiver of any notice to Shareholder that may have been or may be required relating to the Transaction or any of the other transactions contemplated by the Purchase Agreement or this Agreement, and (ii) against any (x) Company Takeover Proposal made by any Person other than the Purchaser, without regard to any recommendation from the Company Boards to shareholders concerning such Company Takeover Proposal, and without regard to the terms of such Company Takeover Proposal, (y) any agreement, amendment of any agreement (including the Company's articles of association or other organizational documents), or any other action that is intended or could reasonably be expected to prevent, impede, interfere with, delay, postpone, or discourage the Transaction and any of the other transactions contemplated by the Purchase Agreement or this Agreement, and (z) any action, agreement, transaction or proposal that would result in a breach of any representation, warranty, covenant, agreement or other obligation of the Company, the Purchased Companies or their Subsidiaries in the Purchase Agreement. The attorneys and proxies named above may not exercise this Irrevocable Proxy on any other mat

herein conferred shall survive the death or incapacity of the undersigned and any obligation of the undersigned hereunder shall be binding upon the heirs, personal representatives, successors and assigns of the undersigned.

This Irrevocable Proxy is coupled with an interest as aforesaid and is irrevocable.

[Remainder of Page Intentionally Left Blank]

Dated: August 16, 2004

Entegris, Inc., a Minnesota corporation

/s/ John D. Villas

Signature: John D. Villas

Chief Financial Officer

Shares beneficially owned: 1,052,887 shares of Company Common Stock 28,124 shares of Company Common Stock issuable upon the exercise of outstanding options, warrants, or other rights