

INTERMOLECULAR INC

Reported by
MARTIN WILLIAM C

FORM 4

(Statement of Changes in Beneficial Ownership)

Filed 12/19/16 for the Period Ending 12/15/16

Address	3011 NORTH FIRST STREET SAN JOSE, CA 95134
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CIK	0001311241
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FORM 4

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

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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or
Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person *		2. Issuer Name and Ticker or Trading Symbol		5. Relationship of Reporting Person(s) to Issuer (Check all applicable)	
MARTIN WILLIAM C		INTERMOLECULAR INC [IMI]		<input type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner <input type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below)	
(Last) (First) (Middle)		3. Date of Earliest Transaction (MM/DD/YYYY)			
C/O RAGING CAPITAL MANAGEMENT, LLC, TEN PRINCETON AVENUE, PO BOX 228		12/15/2016			
(Street)		4. If Amendment, Date Original Filed (MM/DD/YYYY)		6. Individual or Joint/Group Filing (Check Applicable Line)	
ROCKY HILL, NJ 08553-0228				<input type="checkbox"/> Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person	
(City) (State) (Zip)					

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Trans. Date	2A. Deemed Execution Date, if any	3. Trans. Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock, \$.001 par value (U)	12/15/2016		P		10200	A	\$0.9943	14527257	I (U)	By Raging Capital Master Fund, Ltd.
Common Stock, \$.001 par value (U)	12/15/2016		P		76894	A	\$1	14604151	I (U)	By Raging Capital Master Fund, Ltd.
Common Stock, \$.001 par value (U)	12/15/2016		P		5800	A	\$1.01	14609951	I (U)	By Raging Capital Master Fund, Ltd.
Common Stock, \$.001 par value (U)	12/16/2016		P		121400	A	\$1.0407	14731351	I (U)	By Raging Capital Master Fund, Ltd.

Table II - Derivative Securities Beneficially Owned (e.g. , puts, calls, warrants, options, convertible securities)

1. Title of Derivate Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Trans. Date	3A. Deemed Execution Date, if any	4. Trans. Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				

Explanation of Responses:

- (This Form 4 is filed jointly by Raging Capital Management, LLC ("Raging Capital") and William C. Martin (collectively, the "Reporting Persons"). Each of
- 1) the Reporting Persons may be deemed to be a member of a Section 13(d) group that collectively owns more than 10% of the Issuer's outstanding shares of Common Stock. Each of the Reporting Persons disclaims beneficial ownership of the securities reported herein except to the extent of his or its pecuniary interest therein.
 - 2) Represents securities held directly by Raging Capital Master Fund, Ltd. ("Raging Master"). Raging Capital is the Investment Manager of Raging Master.
 - 3) William C. Martin is the Chairman, Chief Investment Officer and Managing Member of Raging Capital. Raging Master has delegated to Raging Capital the sole authority to vote and dispose of the securities held by Raging Master pursuant to an Investment Management Agreement, dated November 9, 2012 (the "IMA"). The IMA may be terminated by any party thereto effective at the close of business on the last day of any fiscal quarter by giving the other party not less than sixty-one days' written notice. As a result, each of Raging Capital and William C. Martin may be deemed to beneficially own the securities held by

Raging Master. Raging Master specifically disclaims beneficial ownership of the securities held by it by virtue of its inability to vote or dispose of such securities as a result of the IMA.

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
MARTIN WILLIAM C C/O RAGING CAPITAL MANAGEMENT, LLC TEN PRINCETON AVENUE, PO BOX 228 ROCKY HILL, NJ 08553-0228		X		
Raging Capital Management, LLC TEN PRINCETON AVENUE PO BOX 228 ROCKY HILL, NJ 08553-0228		X		

Signatures

By: /s/ Frederick C. Wasch as attorney-in-fact for William C. Martin

12/19/2016

—Signature of Reporting Person

Date

By: Raging Capital Management, LLC, By: /s/ Frederick C. Wasch, Chief Financial Officer

12/19/2016

—Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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