

REPORTING PERSON WITH 3,079,500

8. SHARED DISPOSITIVE POWER

0

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

3,079,500

10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

6.64%

12. TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IA

1. NAMES OR REPORTING PERSONS
 S.S. OR I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS

James H. Simons

2. CHECK APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS):

(a)
 (b)

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5. SOLE VOTING POWER

3,079,500

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

6. SHARED VOTING POWER

0

7. SOLE DISPOSITIVE POWER

3,079,500

8. SHARED DISPOSITIVE POWER

0

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

3,079,500

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11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

6.64%

12. TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

IN

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CUSIP No. 72581M107

13G

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Item 1.

(a) Name of Issuer.

PIXELWORKS, INC

(b) Address of Issuer's Principal Executive Offices.

8100 SW Nyberg Road
Tualatin, Oregon 97062

Item 2.

(a) Name of Person Filing.

This Schedule 13G is being filed by Renaissance Technologies LLC
("RTC") and James H. Simons ("Simons").

(b) Address of Principal Business Office or, if none, Residence.

The principal business address of the reporting persons is:

800 Third Avenue
New York, New York 10022

(c) Citizenship.

Dr. Simons is a United States citizen and
RTC is a Delaware limited liability company

(d) Title of Class of Securities.

Common Stock

(e) CUSIP Number.

72581M107

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Item 3. If this statement is filed pursuant to Rule 13d-1(b) or 13d-2(b) or (c),
check whether the person filing is a:

(a) Broker or dealer registered under Section 15 of the Act.

(b) Bank as defined in Section 3(a)(6) of the Act.

(c) Insurance Company as defined in Section 3(a)(19) of the Act.

(d) Investment Company registered under Section 8 of the Investment
Company Act.

(e) Investment Adviser in accordance with Sec. 240.13d-1(b)(1)(ii)(E).

(f) Employee Benefit Plan or Endowment Fund in accordance with Sec.
240.13d1(b)(1)(ii)(F).

(g) Parent holding company, in accordance with Sec.
240.13d-1(b)(ii)(G).

(h) A savings association as defined in Section 3(b) of the Federal
Deposit Insurance Act.

(i) A church plan that is excluded from the definition of an
investment company under Section 3(c)(14) of the Investment
Company Act of 1940.

(j) Group, in accordance with Sec. 240.13d-1(b)(1)(ii)(J).

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: February 12, 2008

/s/ James H. Simons

James H. Simons

Renaissance Technologies LLC

By: /s/ Mark Silber

Mark Silber
Executive Vice President

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (see 18 U.S.C. 1001).

EXHIBIT 99.1

AGREEMENT REGARDING JOINT FILING UNDER
UNDER RULE 13D-1(K) OF THE EXCHANGE ACT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, each of the undersigned agrees to the filing on behalf of each of a Statement on Schedule 13G, and all amendments thereto, with respect to the shares of Common Stock of PIXELWORKS, INC.

Date: February 12, 2008

/s/ James H. Simons

James H. Simons

Renaissance Technologies LLC

By: /s/ Mark Silber

Mark Silber

Executive Vice President