UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 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): July 13, 2005

RUDOLPH TECHNOLOGIES, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware (State or Other Jurisdiction 000-27965 (Commission 22-3531208 (IRS Employer

of Incorporation)

File Number)

Identification No.)

One Rudolph Road

Flanders, New Jersey (Address of Principal Executive Offices)

07836 (Zip Code)

Registrant s telephone number, including area code: (973) 691-1300

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):

- x 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)
- " Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- " Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 8.01. Other Events.

On July 13, 2005, Rudolph Technologies, Inc. (*Rudolph*) and August Technology Corporation (*August Technology*) issued a press release announcing that each company has received notification of early termination of the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, applicable to Rudolph s proposed merger with August Technology.

For additional information concerning the foregoing, a copy of the press release dated July 13, 2005 is attached hereto as Exhibit 99.1 and is incorporated by reference herein.

Item 9.01. Financial Statements and Exhibits.

(c) Exhibits

Exhibit	Description
99.1	Press Release dated July 13, 2005

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 hereunto duly authorized.

RUDOLPH TECHNOLOGIES, INC.

Date: July 13, 2005

By: /S/ STEVEN R. ROTH

Name: Steven R. Roth

Title: Senior Vice President and Chief Financial Officer

EXHIBIT LIST

Exhibit	Description
	
99.1	Press Release dated July 13, 2005