UNITED STATES

SECUR

	CIVILED STATES	
SECURITIES	S AND EXCHANGE CO	OMMISSION
	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) July 15, 200	4 (July 1, 2004)
	ГЕСН SYSTEMS, I	
(E	Exact name of registrant as specified in its charter)
Arizona (State or other jurisdiction	000-11412 (Commission	86-0411215 (IRS Employer
of incorporation)	File Number)	Identification No.)

131 South Clark Drive, Tempe, Arizona (Address of principal executive offices)

85281 (Zip Code)

Not applicable.

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

Item 2. Acquisition or Disposition of Assets.

On July 1, 2004, Amtech Systems, Inc. (the Company) acquired, through its wholly-owned subsidiaries Bruce Technologies, Inc. (Bruce) and Tempress Systems, Inc. (Tempress), certain semiconductor horizontal diffusion furnace operations and assets in the United State and Europe (the Business) from Kokusai Semiconductor Equipment Corporation (KSEC) and its affiliate Kokusai Electric Europe, GmbH (KEE). The acquisition of the Business (the Acquisition) was consummated in accordance with the Asset Purchase Agreement, dated as of May 3, 2004 and amended on June 25, 2004 and July 1, 2004, by and between the Company and KSEC (the KSEC Purchase Agreement), and the Asset Purchase Agreement, dated as of May 3, 2004 and amended on June 25, 2004, by and between the Company and KEE (the KEE Purchase Agreement). The Company assigned all of its rights and obligations under the KSEC Purchase Agreement and the KEE Purchase Agreement to Bruce and Tempress, respectively, immediately prior to the closing of the Acquisition.

At the closing of the Acquisition, Bruce paid \$3,035,935 in cash to KSEC pursuant to the KSEC Purchase Agreement and Tempress paid \$255,829 in cash to KEE pursuant to the KEE Purchase Agreement. Bruce and Tempress also assumed, in the aggregate, an estimated \$300,000 in liabilities of KSEC and KEE. The KSEC Purchase Agreement requires Bruce to make future payments to KSEC of up to \$970,000 based upon the future consumption of inventories transferred to Bruce under the KSEC Purchase Agreement. The Company financed the cash consideration paid by Bruce and Tempress in connection with the Acquisition with available cash and cash equivalents.

The aggregate consideration paid in the Acquisition was determined through arm s length negotiations between representatives of the Company, Bruce and Tempress and representatives of KSEC and KEE. None of the Company, Bruce or Tempress, nor to their knowledge, any of their affiliates, directors or officers, or any associate of any such director or officer, had any material relationship with KSEC or KEE prior to the Acquisition.

The assets acquired principally consist of intellectual property and technology, customer lists, customer contracts, inventories and other tangible property used in connection with the Business. The Company, Bruce and Tempress intend to continue to use such assets for substantially similar purposes as they were used prior to the Acquisition.

Liabilities assumed in connection with the Acquisition include obligations under certain contracts, leases and purchase orders, and warranty claims for certain products and services under warranty as of the date of the Acquisition.

Item 7. Financial Statements, Pro Forma Financial Information and Exhibits.

(a) Financial Statements.

At the time of filing this report on Form 8-K, it is impractical to provide the required financial statements with respect to the transaction described above. The required financial statements will be filed by the Company not later than 60 days following the date upon which this report on Form 8-K must be filed.

(b) Pro Forma Financial Information.

At the time of filing this report on Form 8-K, it is impractical to provide the required pro forma financial information with respect to the transaction described above. The required pro forma financial information will be filed by the Company not later than 60 days following the date upon which this report on Form 8-K must be filed.

(c) Exhibits.

Exhibit No.	Description
2.1	Asset Purchase Agreement, dated May 3, 2004, by and between KSEC and the Company.*
2.2	Amendment, dated June 25, 2004, to the Asset Purchase Agreement by and between KSEC and the Company.
2.3	Amendment, dated July 1, 2004, to the Asset Purchase Agreement by and between KSEC and the Company.
2.4	Asset Purchase Agreement, dated May 3, 2004, by and between KEE and the Company.*
2.5	Amendment, dated June 25, 2004, to the Asset Purchase Agreement by and between KEE and the Company.

^{*} The schedules and exhibits to this document are not being filed with this Form 8-K. The Company agrees to supplementally furnish a copy of any such schedule or exhibit to the Securities and Exchange Commission upon request.

SIGNATURE

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.

AMTECH SYSTEMS, INC.

Date: July 15, 2004 By: /s/ Marc P. Padwe

Name: Marc P. Padwe Title: Corporate Controller

EXHIBIT INDEX

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