SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549 SCHEDULE 13D (Rule 13d-101) INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO 13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT TO 13d-2(a) (Amendment No. _)/1/ Key Technology, Inc. (Name of Issuer) Series B Preferred Stock, \$.01 par value Warrants to Purchase Common Stock (Title of Class of Securities) 493143 20 9 493143 11 9 (CUSIP Number) Steven H. Shapiro FMC Technologies Inc. 200 East Randolph Drive Chicago, Illinois 60601 (312) 861-5950 With a copy to: Thomas A. Cole Sidley Austin Brown & Wood Bank One Plaza 10 South Dearborn Street Chicago, Illinois 60603 (312) 853-7000 (Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications) August 3, 2001 (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 which 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 : []

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

(Continued on following pages)

/1/ The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

Common Stock, \$0.01 par value CUSIP No. 493143 10 1	13D	Page 2 of 12

NAME OF REPORTING PERSONS 1 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) FMC Technologies, Inc. _____ CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* 2 Approximately 83% of the outstanding common stock of FMC Technologies, Inc., is held by FMC Corporation. FMC Corporation intends to distribute these shares to its stockholders by the end of 2001. (a) [X] (b) [_] _____ SEC USE ONLY 3 _____ _____ SOURCE OF FUNDS* 4 SC:WC _____ _ _ _ CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) [_] 5 _____ CITIZENSHIP OR PLACE OF ORGANIZATION 6 Delaware _____ SOLE VOTING POWER 7 NUMBER OF 0 SHARES _____ SHARED VOTING POWER BENEFICIALLY 8 OWNED BY 192,500 (Constituting 140,000 shares of Common Stock issuable upon conversion of Series B Preferred Stock (which is subject to a warrant) and 52,500 shares of Common Stock issuable upon exercise of Warrants) EACH SOLE DISPOSITIVE POWER 9 REPORTING 0 _____ PERSON SHARED DISPOSITIVE POWER WITH 10 192,500 (Constituting 140,000 shares of Common Stock issuable upon conversion of Series B Preferred Stock (which is subject to a warrant) and 52,500 shares of Common Stock issuable upon exercise of Warrants) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 11 192,500 ____ _____ CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES 12 [_] ____ _____ PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 13 3.9% _____ TYPE OF REPORTING PERSON* 14 CO _____ *SEE INSTRUCTIONS BEFORE FILLING OUT! _____ Series B Preferred Stock, \$10.00 par value 13D Page 3 of 12 CUSIP No. 493143 20 0 -----_____

I.R.S.	IDENTIFICAT	ION NOS. OF ABOVE	PERSONS (EN	NTITIES ONI	LY)
FMC Tec	hnologies,	Inc.			
CHECK T	HE APPROPRI	ATE BOX IF A MEME	ER OF A GROU	JP*	
Approxi Inc., i	s held by Fi hares to it	of the outstandir MC Corporation. E s stockholders by	MC Corporation the end of	ion intends 2001.	
SEC USE					
	OF FUNDS*				
SC;WC					
	OX IF DISCL S 2(d) or 2	DSURE OF LEGAL PF (e) [_]	OCEEDINGS IS	S REQUIRED	PURSUANT
CITIZEN Delawar		CE OF ORGANIZATIC	N		
NUMBER O	7 F	SOLE VOTING POW	ER		
SHARES BENEFICIAL OWNED BY		SHARED VOTING E 210,000(1)	OWER		
EACH REPORTING	9	SOLE DISPOSITIV 0	E POWER		
PERSON WITH	10	SHARED DISPOSIT	IVE POWER		
AGGREGA 210,000		ENEFICIALLY OWNED	BY EACH REP	PORTING PE	RSON
CHECK B		GGREGATE AMOUNT I	N ROW (11) E	EXCLUDES CE	ERTAIN SHARES*
[_]				(11)	
13.6%	UF CLASS R.	EPRESENTED BY AMC	UNI IN KUW	(±⊥)	
TYPE OF CO	REPORTING	PERSON*			
exerci	t to an opt se of the o	EE INSTRUCTIONS E ion with an aggre ption, FMC Techno ase 52,500 shares	gate exercis logies, Inc.	se price of . would als	so receive

warrants to purchase 52,500 shares of Common Stock at an exercise price of \$15 per share.

-3-

L	NAME OF REPO		PERSONS ION NOS. OF ABOVE PERSONS (ENTITI)	ES ONLY)
	FMC Technolo			
-	CHECK THE AP	PROPRI	ATE BOX IF A MEMBER OF A GROUP*	
	Inc., is hel	d by F	of the outstanding common stock of MC Corporation. FMC Corporation in s stockholders by the end of 2001	ntends to distribut
-	SEC USE ONLY			
_	SOURCE OF FU			
_	SC:WC			
	CHECK BOX IF TO ITEMS 2(d		OSURE OF LEGAL PROCEEDINGS IS REQU (e) [_]	JIRED PURSUANT
-	CITIZENSHIP Delaware	OR PLA	CE OF ORGANIZATION	
-			SOLE VOTING POWER	
	NUMBER OF	7	0	
	SHARES	FICIALLY 8	SHARED VOTING POWER	
	BENEFICIALLY OWNED BY		52,500(1)	
	EACH		SOLE DISPOSITIVE POWER	
	REPORTING	9	0	
	PERSON WITH	10	SHARED DISPOSITIVE POWER	
	W 1 1 1	τu	52,500(1)	
-	AGGREGATE AM	OUNT B	ENEFICIALLY OWNED BY EACH REPORTIN	NG PERSON
	52,500(1)			
-	CHECK BOX IF		GGREGATE AMOUNT IN ROW (11) EXCLUI	
	[_]			
-			EPRESENTED BY AMOUNT IN ROW (11)	
	31.6%			
	TYPE OF REPO			
_				

 Subject to an option with an aggregate exercise price of \$2,520,000. Upon exercise of the option, FMC Technologies, Inc. would also receive 210,000 shares of Series B Preferred Stock. This Statement on Schedule 13D (this "Statement") relates to the Series B Preferred Stock, par value \$.01 per share, of Key Technology, Inc., an Oregon corporation (the "Issuer"), and Warrants to purchase the Common Stock, no par value (the "Common Stock"), of the Issuer. Information regarding the Common Stock is not required and is for informational purposes only. The principal executive offices of the Issuer are located at 150 Avery Street, Walla Walla, Washington 99362.

ITEM 2. IDENTITY AND BACKGROUND.

(a)-(e). This Statement is being filed by FMC Technologies, Inc., a Delaware corporation ("Technologies"). The address of Technologies' principal business and principal office is 200 East Randolph Drive, Chicago, Illinois 60601. The principal business of Technologies is providing mission-critical technology solutions for the energy, food processing and air transportation industries.

During the last five years, Technologies has not (i) been convicted in a criminal proceeding or (ii) been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding 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.

The following sets forth as to each executive officer and director of Technologies: (a) name; (b) residence or business address; (c) present principal occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted; (d) whether or not, during the last five years, such person has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors); (e) whether or not, during the last five years, such person was a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding 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; and (f) citizenship.

⊥ •	(a)	Robert N. Buit director
	(b)	200 East Randolph Drive, Chicago, Illinois 60601
	(C)	Chairman of the Board of Technologies
	(d)	No
	(e)	No
	(f)	United States of America
2.	(a)	Joseph H. Netherlandexecutive officer
	(b)	200 East Randolph Drive, Chicago, Illinois 60601
	(C)	President and Chief Executive Officer of Technologies
	(d)	No
	(e)	No
	(f)	United States of America
3.	(a)	William H. Schumann III executive officer
	(b)	200 East Randolph Drive, Chicago, Illinois 60601
	(C)	Senior Vice President and Chief Financial Officer of Technologies
	(d)	No
	(e)	No
	(f)	United States of America
		-5-
4.	(a)	Jeffrey W. Carr executive officer
	(b)	200 East Randolph Drive, Chicago, Illinois 60601
	(C)	Vice President, General Counsel and Corporate Secretary of

- Technologies
- (d) No
- (e) No

5.

(f) United States of America

(a) Dohart N Durt director

- (a) Charles H. Cannon, Jr.-- executive officer
 - (b) 200 East Randolph Drive, Chicago, Illinois 60601
 - (c) Vice President of Technologies
 - (d) No

(e) No (f) United States of America (a) Peter D. Kinnear--executive officer 6. (b) 200 East Randolph Drive, Chicago, Illinois 60601 (c) Vice President of Technologies (d) No (e) No (f) United States of America 7. (a) Robert L. Potter-- executive officer (b) 200 East Randolph Drive, Chicago, Illinois 60601 (c) Vice President of Technologies (d) No (e) No (f) United States of America (a) Ronald D. Mambu-- executive officer 8. (b) 200 East Randolph Drive, Chicago, Illinois 60601 Vice President and Controller of Technologies (C) (d) No (e) No (f) United States of America -6-9. (a) Mike R. Bowlin-- director (b) MJB Ranch, 4800 Zion Hill Road, Weatherford, Texas 76088 (c) Retired Chairman and Chief Executive Officer of Atlantic Richfield Corporation, 515 South Flower Street, Los Angeles, CA 90071 (d) No (e) No (f) United States of America 10. (a) B.A. Bridgewater, Jr.-- director (b) Brown Group, Inc., 7701 Forsyth Boulevard, St. Louis, MO 63105 (c) Retired Chairman of the Board, President and Chief Executive Officer of Brown Group, Inc., a diversified marketer and retailer of footwear, 7701 Forsyth Boulevard, St. Louis, MO 63105 (d) No (e) No (f) United States of America 11. (a) William F. Reilly-- director (b) PRIMEDIA Inc., 375 Park Avenue, Suite 1507, New York, NY 10152 (c) Founder of PRIMEDIA Inc., a diversified media company, 375 Park Avenue, Suite 1507, New York, NY 10152 (d) No (e) No (f) United States of America 12. (a) James M. Ringler-- director (b) Illinois Tool Works, Inc., 3600 West Lake Avenue, Glenview, Illinois 60025 (c) Vice Chairman, Illinois Tool Works, Inc., 3600 West Lake Avenue, Glenview, Illinois 60025. (d) No (e) No (f) United States of America 13. (a) James R. Thompson-- director (b) Winston & Strawn, 35 West Wacker Drive, Chicago, Illinois 60601 (c) Chairman, Chairman of the Executive Committee and Partner of Law firm of Winston & Strawn, 35 West Wacker Drive, Chicago, Illinois 60601 (d) No (e) No (f) United States of America

- (a) Asbj0rn Larsen-- director
 (b) c/o ICG AS Stranden 1A 0250 Oslo, Norway
 (c) Retired President and Chief Executive Officer of Saga Petroleum ASA, a petroleum company, P.O. Box 1345 VIKA, N-0113 Oslo, Norway
 (d) No
 (e) No
 - (f) Norway
 - _

1	5	
_	~	

- (a) Edward J. Mooney-- director
 (b) Suez Lyonnaise Des Eaux, The Primacy Business Center, 1111 East Warrenville Road, Suite 214, Naperville, Illinois 60563-1198
 (c) Delegue General, Suez Lyonnaise Des Eaux, The Primacy Business
 - Center, 1111 East Warrenville Road, Suite 214, Naperville, Illinois 60563-1198
 - (d) No
 - (e) No
 - (f) United States of America

ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION.

Pursuant to the terms of an Agreement and Plan of Merger dated February 15, 2000, as amended (the "Merger Agreement"), among the Issuer, KTC Acquisition Corp. ("Sub") and Advanced Machine Vision Corporation ("AMVC"), all of the Series B Preferred Stock of AMVC held by FMC Corporation, a Delaware corporation and owner of approximately 83% of the common stock of Technologies ("Parent"), converted into 119,106 shares of the Issuer's Series C Preferred Stock, par value \$20 per share (the "Series C Preferred Stock"), and warrants to purchase 29,776 shares of Common Stock of the Issuer at an exercise price of \$15 per share (the "Series C Warrants"). Each share of Series C Preferred Stock is convertible at any time into 1 2/3 shares of Common Stock of the Issuer. In addition, pursuant to an Agreement dated April 24, 2000 (the "Key Agreement") among Parent, the Issuer, Sub and AMVC, concurrently with the consummation of the transactions contemplated by the Merger Agreement, an option held by Parent to purchase common stock of AMVC converted into an option (the "FMC Option"), exercisable for \$2,520,000, to purchase 210,000 shares of the Issuer's Series B Preferred Stock, par value \$10 per share (the "Series B Preferred Stock"), and warrants to purchase 52,500 shares of Common Stock of the Issuer at \$15 per share (the "Series B Warrants" and, together with the Series C Warrants, the "Warrants"). Each share of Series B Preferred Stock is convertible at any time into 2/3 of a share of Common Stock of the Issuer. The FMC Option may be exercised at any time (in all or in part) by Technologies until October 14, 2003, at which time the FMC Option terminates. The source of funds to be used in connection with the exercise of the FMC Option and the Warrants will be Technologies' working capital.

ITEM 4. PURPOSE OF TRANSACTION.

Parent acquired the Series B Preferred Stock and the Series B Warrants pursuant to the Merger Agreement. Parent acquired the FMC Option pursuant to the Key Agreement. Parent subsequently transferred all of its right, title and interest in and to the Series B Preferred Stock, the Series B Warrants and the FMC Option to Technologies. On August 3, 2001, Technologies exercised its redemption rights with respect to its 119,106 shares of Series C Preferred Stock and warrants to purchase 29,776 shares of Common Stock, resulting in expected proceeds of \$2,679,880.

Technologies currently intends to review its investment in the Issuer periodically and, depending on such review and factors including market conditions and share prices, the Issuer's business prospects and technology, future developments, applicable legal requirements and other factors that the

-8-

management of Technologies may deem material to its investment decision, Technologies may seek to acquire additional securities of the Issuer or sell securities of the Issuer from time to time in the open market, in negotiated transactions, in transactions with the Issuer pursuant to the terms of the securities or otherwise or by any other permissible means. Except as set forth above, Technologies has no present plans or proposals which may be related to or would result in:

(a) The acquisition by any person of additional securities of the Issuer, or the disposition of securities of the Issuer;

(b) An extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries;

(c) A sale or transfer of a material amount of assets of the Issuer or any of its subsidiaries;

(d) Any change in the present board of directors or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the issuer's board of directors;

(e) Any material change in the present capitalization or dividend policy of the Issuer;

(f) Any other material change in the Issuer's business or corporate structure;

(g) Changes in the Issuer's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Issuer by any person;

(h) Causing a class of securities of the issuer to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;

(i) A class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Act; or

(j) Any action similar to any of those enumerated above.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER.

Technologies beneficially owns 192,500 shares of Common Stock, constituting 3.9% of the outstanding shares of the Issuer's Common Stock as of July 31, 2001. Based upon filings by the Issuer with the Securities and Exchange Commission and in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended, Technologies beneficially owns (i) 210,000 shares of Series B Preferred Stock, constituting 13.6% of the outstanding shares of the Series B Preferred Stock and (ii) Warrants to purchase 52,500 shares of Common Stock, constituting 31.6% of the outstanding Warrants. To the best knowledge of FMC, none of the other persons listed in Item 2 hereof owns any securities of the Issuer.

ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIPS WITH RESPECT TO SECURITIES OF THE ISSUER.

As described in Items 3 and 4, Parent acquired the Series C Preferred Stock and the Series C Warrants pursuant to the Merger Agreement. Parent acquired the FMC Option pursuant to the Key Agreement. Parent subsequently transferred all of its right, title and interest in and to the Series B Preferred Stock, the Series B Warrants and the FMC Option to Technologies.

-9-

Series C Preferred Stock. Pursuant to the Certificate of Designation

for the Series C Preferred Stock, Technologies has a put right requiring the Issuer to purchase at any time any or all of its Series C Preferred Stock at the redemption price of \$20.00. On August 3, 2001, Technologies exercised its redemption rights with respect to its 119,106 shares of Series C Preferred Stock, resulting in expected proceeds of \$2,382,120.

Series B Preferred Stock. Pursuant to the Certificate of Designation

for the Series B Preferred Stock, each share of Series B Preferred Stock may be converted into 2/3 of a share of Common Stock of the Issuer in two instances:

- by the holders of such shares at any time; or
- by the Issuer upon a merger, consolidation, share exchange or sale of substantially all of its assets.

In the event of any liquidation, dissolution or winding up of the Issuer, the holders of Series B Preferred Stock are entitled to a payment of

\$10.00 per share, plus all accrued but unpaid dividends before any amount is distributed to holders of Common Stock. If the assets are insufficient to permit this payment to the holders of Series B Preferred Stock, then the entire assets available for distribution to the holders of capital stock shall be distributed ratably among the holders of Series B Preferred Stock and Series C Preferred Stock.

The holders of Series B Preferred Stock are entitled to vote on all matters. Series B Preferred Stock holders vote the number of whole shares of Common Stock into which the holder's Series B Preferred Stock could be converted.

The Issuer must redeem the Series C Preferred Stock for \$10.00 per share, plus accrued but unpaid dividends on the fifth anniversary of the first day shares of Series B Preferred Stock were issued. The redemption date may be accelerated if the average closing price of the Issuer's Common Stock, as listed on the Nasdaq National Market, is \$15.00 or more for thirty consecutive trading days. In addition, holders of Series B Preferred Stock have a put right requiring the Issuer to purchase at any time after the second anniversary of the first date shares of Series B Preferred Stock were issued any or all of their Series B Preferred Stock at the redemption price of \$10.00.

Prior to the expiration date of the Series C Warrants, Technologies may require the Issuer to redeem the Series C Warrants for cash at a price equal to \$10.00 for each whole share of Common Stock that may be purchased under the Series C Warrants. Technologies does not have the right to vote or participate in any other matters as a shareholder pursuant to the Warrants. On August 3, 2001, Technologies exercised its redemption rights with respect to its warrants to purchase 29,776 shares of Common Stock, resulting in expected proceeds of \$297,760.

The Series B Warrants have identical terms to the Series C Warrants, but will not be issued until such time, if any, that Technologies exercises the FMC Option.

General. The Key Agreement, the Key Option, the forms of the

Certificate of Designation for the Series B Preferred Stock and the Series C Preferred Stock and the form of the Warrants are attached as exhibits hereto and the descriptions of the foregoing contained herein are qualified in their entirety to such exhibits, which are incorporated by reference.

-10-

Except as described herein, neither Technologies nor, to the best knowledge of Technologies, any of the other persons listed in Item 2 hereof, has entered into any contracts, arrangements, understandings of relationships with any person with respect to any securities of the Issuer.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS.

Exhibit 1	Agreement dated as of April 24, 2000 among FMC Corporation, Key Technology Inc., KTC Acquisition Corp. and Advanced Machine Vision Corporation. Incorporated by reference to Exhibit 10 to Amendment No. 3 to Schedule 13D filed by FMC Corporation with respect to Advanced Machine Vision Corporation on April 27, 2000.*
Exhibit 2	Form of Certificate of Designation for Series B Convertible Preferred Stock of Key Technology, Inc.*
Exhibit 3	Form of Certificate of Designation for Series C Convertible Preferred Stock of Key Technology, Inc.*
Exhibit 4	Form of Warrant to Purchase Shares of Common Stock of Key Technology, Inc.*
Exhibit 5 Exhibit 6	Form of Warrant Agreement* Option Agreement dated as of July 12, 2000 between Key Technology, Inc. and FMC Corporation*

Previously filed as exhibits to Parent's Statement on Schedule 13D dated July 20, 2000.

-11-

SIGNATURE

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

Dated: September 24, 2001

*

FMC TECHNOLOGIES, INC.

By: /s/ Charles H. Cannon, Jr. Name: Charles H. Cannon, Jr. Title: Vice President

-12-