

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934  
(Amendment No. 1)\*

EP Medsystems, Inc.  
(Name of Issuer)

Common  
(Title of Class of Securities)

26881P 10 3  
(CUSIP Number)

December 31, 1999  
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

Rule 13d-1(b)  
 Rule 13d-1(c)  
 Rule 13d-1(d)

\*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 the 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 ("Act") 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).

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1 NAMES OF REPORTING PERSONS/  
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)  
Medtronic, Inc.  
41-0793183

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\* (a) [ ]  
(b) [ ]

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION  
MN

NUMBER OF 5 SOLE VOTING POWER  
SHARES 518,000  
BENEFICIALLY

OWNED BY EACH REPORTING PERSON WITH	6	SHARED VOTING POWER None
	7	SOLE DISPOSITIVE POWER 518,000
	8	SHARED DISPOSITIVE POWER None

  

9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 518,000
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* [ ]
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 4.7%
12	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) CO

Answer every item. If an item is inapplicable or the answer is in the negative, so state.

- Item 1(a) Name of Issuer:  
EP Medsystems, Inc.
- Item 1(b) Address of Issuer's Principal Executive Offices:  
100 Stierli Court  
Suite 107  
Mount Arlington, NJ 07856
- Item 2(a) Name of Person Filing:  
Medtronic, Inc.
- Item 2(b) Address of Principal Business Office or, if none, residence:  
7000 Central Avenue N.E.  
Minneapolis, MN 55432
- Item 2(c) Citizenship:  
See Cover Page Item 4
- Item 2(d) Title of Class of Securities:  
Common Stock
- Item 2(e) CUSIP No.:  
See Cover Page
- 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 Exchange Act.
- (b)  Bank as defined in Section 3(a)(b) of the Exchange Act.
- (c)  Insurance company as defined in Section 3(a)(19) of the Exchange Act.

- (d)  Investment company registered under Section 8 of the Investment Company Act.
- (e)  An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E).
- (f)  An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F).
- (g)  A parent holding company or control person in accordance with Rule 13d-1(b)(1)(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.
- (j)  Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

If this statement is filed pursuant to Rule 13d-1(c), check this box.

Item 4 Ownership

See Cover Page Items 5 through 11

Item 5 Ownership of Five Percent or Less of a Class:

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following .

Item 6 Ownership of More than Five Percent on Behalf of Another Person:

Not applicable

Item 7 Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company:

Not applicable

Item 8 Identification and Classification of Members of the Group:

Not applicable

Item 9 Notice of Dissolution of Group:

Not applicable

Item 10 Certification:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

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.

February 11, 2000  
(Date)

/s/ Robert L. Ryan  
(Signature)

Robert L. Ryan, Chief Financial Officer  
(Name and title)