MASIMO CORP Form SC 13G/A March 10, 2014

SCHEDULE 13G

Amendment No. 1 MASIMO CORP Common Stock Cusip #574795100

Cusip #574795100

Item 1: Reporting Person - FMR LLC

Item 7: 5,705,773

Item 8: 0

Item 9: 5,705,773
Item 11: 10.062%
Item 12: HC

Cusip #574795100

Item 1: Reporting Person - Edward C. Johnson 3d

Item 4: United States of America

Item 5: 0
Item 6: 0

Item 7: 5,705,773

Item 8: 0

Item 9: 5,705,773
Item 11: 10.062%
Item 12: IN

SCHEDULE 13G - TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULE 13d-1(b) or 13d-2(b)

Item 1(a). Name of Issuer:

MASIMO CORP

Item 1(b). Name of Issuer's Principal Executive Offices:

40 Parker

Irvine, California 92618

Item 2(a). Name of Person Filing:

FMR LLC

Item 2(b). Address or Principal Business Office or, if None,

Residence:

245 Summer Street, Boston, Massachusetts 02210

Item 2(c). Citizenship:

Not applicable

Item 2(d). Title of Class of Securities:

Common Stock

Item 2(e). CUSIP Number:

574795100

Item 3. This statement is filed pursuant to Rule 13d-1(b) or 13d-2(b) and the person filing, FMR LLC, is a parent holding company in accordance with Section 240.13d-1(b) (ii) (G). (Note: See Item 7).

Item 4. Ownership

(a) Amount Beneficially Owned: 5,705,773

(b) Percent of Class: 10.062%

(c) Number of shares as to which such person has:

i) sole power to vote or to direct the vote: 1,473

(ii) shared power to vote or to direct the vote:

(iii) sole power to dispose or to direct the

disposition of: 5,705,773

(iv) shared power to dispose or to direct the

disposition of: 0

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

Not applicable.

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

Various persons have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the Common Stock of MASIMO CORP. No one person's interest in the Common Stock of MASIMO CORP is more than five percent of the total outstanding Common Stock.

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

See attached Exhibit A.

Item 8. Identification and Classification of Members of the Group.

Not applicable. See attached Exhibit A.

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 acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in

any transaction having such 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.

March 7, 2014

/s/ Scott C. Goebel Signature

Scott C. Goebel

Duly authorized under Power of Attorney effective as of June 1, 2008, by and on behalf of FMR LLC and its direct and indirect subsidiaries SCHEDULE 13G - TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULE 13d-1(b) or 13d-2(b)

Pursuant to the instructions in Item 7 of Schedule 13G, Fidelity Management & Research Company ("Fidelity"), 245 Summer Street, Boston, Massachusetts 02210, a wholly-owned subsidiary of FMR LLC and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, is the beneficial owner of 2,361,383 shares or 4.164% of the Common Stock outstanding of MASIMO CORP ("the Company") as a result of acting as investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940.

Edward C. Johnson 3d and FMR LLC, through its control of Fidelity, and the funds each has sole power to dispose of the 2,361,383 shares owned by the Funds.

Fidelity SelectCo, LLC ("SelectCo"), 1225 17th Street, Suite 1100, Denver, Colorado 80202, a wholly-owned subsidiary of FMR LLC and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, is the beneficial owner of 3,342,917 shares or 5.895% of the Common Stock outstanding of MASIMO CORP ("the Company") as a result of acting as investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940 (the "SelectCo Funds").

Edward C. Johnson 3d and FMR LLC, through its control of SelectCo, and the SelectCo Funds each has sole power to dispose of the 3,342,917 owned by the SelectCo Funds.

Members of the family of Edward C. Johnson 3d, Chairman of FMR LLC, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B shareholders have

entered into a shareholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC.

Neither FMR LLC nor Edward C. Johnson 3d, Chairman of FMR LLC, has the sole power to vote or direct the voting of the shares owned directly by the Fidelity Funds, which power resides with the Funds' Boards of Trustees. Fidelity carries out the voting of the shares under written guidelines established by the Funds' Boards of Trustees.

SCHEDULE 13G - TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULE 13d-1(b) or 13d-2(b) RULE 13d-1(f)(1) AGREEMENT

The undersigned persons, on March 7, 2014, agree and consent to the joint filing on their behalf of this Schedule 13G in connection with their beneficial ownership of the Common Stock of MASIMO CORP at February 28, 2014.

FMR LLC

By /s/ Scott C. Goebel

Scott C. Goebel

Duly authorized under Power of Attorney effective as of June 1, 2008, by and on behalf of FMR LLC and its direct and indirect subsidiaries

Edward C. Johnson 3d

By /s/ Scott C. Goebel

Scott C. Goebel

Duly authorized under Power of Attorney effective as of June 1, 2008, by and on behalf of Edward C. Johnson 3d

Fidelity Management & Research Company

By /s/ Scott C. Goebel

Scott C. Goebel

Senior V.P. and General Counsel

Document-Separator. This page separates the filing documents of two notifications.

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Exhibit A