NANOMETRICS INC
Form SC 13G
October 10, 2014

CUSIP NO. 630077105 13G
Page 1 of 14

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No.)*

NANOMETRICS INCORPORATED

(Name of Issuer)

Common Stock, $0.001 par value per share

(Title of Class of Securities)

630077105

(CUSIP Number)

September 30, 2014

(Date of Event Which Requires Filing of this Statement)

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

filed:

[X] 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 in 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.

Franklin Resources, Inc.

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b) X

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

5. SOLE VOTING POWER

(See Item 4)

6. SHARED VOTING POWER

(See Item 4)

7. SOLE DISPOSITIVE POWER

(See Item 4)

8. SHARED DISPOSITIVE POWER

(See Item 4)

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,572,950

10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES [ ]

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

10.7%

12. TYPE OF REPORTING PERSON

HC, CO (See Item 4)

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1. NAMES OF REPORTING PERSONS.

Charles B. Johnson

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b) X

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

USA

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

5. SOLE VOTING POWER

(See Item 4)

6. SHARED VOTING POWER

(See Item 4)

7. SOLE DISPOSITIVE POWER

(See Item 4)

8. SHARED DISPOSITIVE POWER

(See Item 4)

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,572,950

10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES [ ]

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

10.7%

12. TYPE OF REPORTING PERSON

HC, IN (See Item 4)

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1. NAMES OF REPORTING PERSONS.

Rupert H. Johnson, Jr.

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b) X

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

USA

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

5. SOLE VOTING POWER

(See Item 4)

6. SHARED VOTING POWER

(See Item 4)

7. SOLE DISPOSITIVE POWER

(See Item 4)

8. SHARED DISPOSITIVE POWER

(See Item 4)

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,572,950

10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES [ ]

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

10.7%

12. TYPE OF REPORTING PERSON

HC, IN (See Item 4)

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1. NAMES OF REPORTING PERSONS.

Franklin Advisers, Inc.

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b) X

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

California

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:

5. SOLE VOTING POWER

2,258,020

6. SHARED VOTING POWER

0

7. SOLE DISPOSITIVE POWER

2,371,420

8. SHARED DISPOSITIVE POWER

0

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

2,371,420

10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES [ ]

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

9.8%

12. TYPE OF REPORTING PERSON

IA, CO (See Item 4)

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Item 1.

(a) Name of Issuer

NANOMETRICS INCORPORATED

(b) Address of Issuer's Principal Executive Offices

1550 Buckeye Drive

Milpitas, CA 95035

Item 2.

(a) Name of Person Filing

(i): Franklin Resources, Inc.

(ii): Charles B. Johnson

(iii): Rupert H. Johnson, Jr.

(iv): Franklin Advisers, Inc.

(b) Address of Principal Business Office or, if none, Residence

(i), (ii), and (iii):

One Franklin Parkway

San Mateo, CA 94403 1906

(iv): One Franklin Parkway

San Mateo, CA 94403 1906

(c) Citizenship

(i): Delaware

(ii) and (iii): USA

(iv): California

(d) Title of Class of Securities

Common Stock, $0.001 par value per share

(e) CUSIP Number

630077105

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Item 3. If this statement is filed pursuant to §§240.13d 1(b) or 240.13d 2(b) or (c),

check whether the person filing is a:

(a) [ ] Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).

(b) [ ] Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).

(c) [ ] Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C.

78c).

(d) [ ] Investment company registered under section 8 of the Investment Company

Act of 1940 (15 U.S.C 80a 8).

(e) [X] An investment adviser in accordance with §240.13d 1(b)(1)(ii)(E);

(f) [ ] An employee benefit plan or endowment fund in accordance with

§240.13d 1(b)(1)(ii)(F);

(g) [X] A parent holding company or control person in accordance with

§240.13d 1(b)(1)(ii)(G);

(h) [ ] A savings associations as defined in Section 3(b) of the Federal Deposit

Insurance Act (12 U.S.C. 1813);

(i) [ ] A church plan that is excluded from the definition of an investment

company under section 3(c)(14) of the Investment Company Act of 1940 (15

U.S.C. 80a 3);

(j) [ ] A non U.S. institution in accordance with §240.13d 1(b)(ii)(J);

(k) [ ] Group, in accordance with §240.13d 1(b)(1)(ii)(K).

If filing as a non U.S. institution in accordance with §240.13d 1(b)(1)(ii) (J).

please specify the type of institution:

Item 4. Ownership

The securities reported herein are beneficially owned by one or more open or closed end

investment companies or other managed accounts that are investment management clients of

investment managers that are direct and indirect subsidiaries (each, an "Investment

Management Subsidiary" and, collectively, the "Investment Management Subsidiaries") of

Franklin Resources Inc. ("FRI"), including the Investment Management Subsidiaries listed

in this Item 4. When an investment management contract (including a sub advisory

agreement) delegates to an Investment Management Subsidiary investment discretion or

voting power over the securities held in the investment advisory accounts that are

subject to that agreement, FRI treats the Investment Management Subsidiary as having sole

investment discretion or voting authority, as the case may be, unless the agreement

specifies otherwise. Accordingly, each Investment Management Subsidiary reports on

Schedule 13G that it has sole investment discretion and voting authority over the

securities covered by any such investment management agreement, unless otherwise noted in

this Item 4. As a result, for purposes of Rule 13d 3 under the Act, the Investment

Management Subsidiaries listed in this Item 4 may be deemed to be the beneficial owners

of the securities reported in this Schedule 13G.

Beneficial ownership by Investment Management Subsidiaries and other FRI affiliates is

being reported in conformity with the guidelines articulated by the SEC staff in Release

No. 34 39538 (January 12, 1998) relating to organizations, such as FRI, where related

entities exercise voting and investment powers over the securities being reported

independently from each other. The voting and investment powers held by Franklin Mutual

Advisers, LLC ("FMA"), an indirect wholly owned Investment Management Subsidiary, are

exercised independently from FRI and from all other Investment Management Subsidiaries

(FRI, its affiliates and the Investment Management Subsidiaries other than FMA are

collectively, "FRI affiliates"). Furthermore, internal policies and procedures of FMA and

FRI establish informational barriers that prevent the flow between FMA and the FRI

affiliates of information that relates to the voting and investment powers over the

securities owned by their respective management clients. Consequently, FMA and FRI

affiliates report the securities over which they hold investment and voting power

separately from each other for purposes of Section 13 of the Act.

Charles B. Johnson and Rupert H. Johnson, Jr. (the "Principal Shareholders") each own in

excess of 10% of the outstanding common stock of FRI and are the principal stockholders

of FRI. FRI and the Principal Shareholders may be deemed to be, for purposes of Rule

13d 3 under the Act, the beneficial owners of securities held by persons and entities for

whom or for which FRI subsidiaries provide investment management services. The number of

shares that may be deemed to be beneficially owned and the percentage of the class of

which such shares are a part are reported in Items 9 and 11 of the cover pages for FRI

and each of the Principal Shareholders. FRI, the Principal Shareholders and each of the

Investment Management Subsidiaries disclaim any pecuniary interest in any of the such

securities. In addition, the filing of this Schedule 13G on behalf of the Principal

Shareholders, FRI and the FRI affiliates, as applicable, should not be construed as an

admission that any of them is, and each of them disclaims that it is, the beneficial

owner, as defined in Rule 13d 3, of any of the securities reported in this Schedule 13G.

FRI, the Principal Shareholders, and each of the Investment Management Subsidiaries

believe that they are not a “group” within the meaning of Rule 13d 5 under the Act and

that they are not otherwise required to attribute to each other the beneficial ownership

of the securities held by any of them or by any persons or entities for whom or for which

the Investment Management Subsidiaries provide investment management services.

(a) Amount beneficially owned:

2,572,950

(b) Percent of class:

10.7%

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

(i) Sole power to vote or to direct the vote

Franklin Resources, Inc.: 0

Charles B. Johnson: 0

Rupert H. Johnson, Jr.: 0

Franklin Advisers, Inc.: 2,258,020

Franklin Templeton Portfolio Advisors, Inc. [1]: 162,630

Fiduciary Trust Company International: 38,900

(ii) Shared power to vote or to direct the vote 0

(iii) Sole power to dispose or to direct the disposition of

Franklin Resources, Inc.: 0

Charles B. Johnson: 0

Rupert H. Johnson, Jr.: 0

Franklin Advisers, Inc.: 2,371,420

Franklin Templeton Portfolio Advisors, Inc.: 162,630

Fiduciary Trust Company International: 38,900

(iv) Shared power to dispose or to direct the disposition of 0

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 [ ]. Not Applicable

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

The clients of the Investment Management Subsidiaries, including investment companies registered under the Investment Company Act of 1940 and other managed accounts, have the right to receive or power to direct the receipt of dividends from, and the proceeds from the sale of, the securities reported herein.

Franklin Small Cap Growth Fund, a series of Franklin Strategic Series, an

investment company registered under the Investment company Act of 1940, has an

interest in 1,507,300 shares, or 6.2%, of the class of securities reported herein.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security

Being Reported on By the Parent Holding Company

See Attached Exhibit C

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 acquired and are held in the ordinary course of business and 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.

This report shall not be construed as an admission by the persons filing the report that they are the beneficial owner of any securities covered by this report.

Exhibits.

Exhibit A Joint Filing Agreement

Exhibit B Limited Powers of Attorney for Section 13 Reporting Obligations

Exhibit C Item 7 Identification and Classification of Subsidiaries

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.

Dated: October 8, 2014

Franklin Resources, Inc.

Charles B. Johnson

Rupert H. Johnson, Jr.

Franklin Advisers, Inc.

By: /s/MARIA GRAY

Maria Gray

Vice President and Secretary of Franklin Resources, Inc.

Attorney in Fact for Charles B. Johnson pursuant to Power of Attorney attached to

this Schedule 13G

Attorney in Fact for Rupert H. Johnson, Jr. pursuant to Power of Attorney

attached to this Schedule 13G

Secretary of Franklin Advisers, Inc.

Franklin Strategic Series on behalf of

Franklin Small Cap Growth Fund

By: /s/LORI A. WEBER

Lori A. Weber

Vice President and Assistant Secretary of Franklin Strategic Series

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EXHIBIT A

JOINT FILING AGREEMENT

In accordance with Rule 13d 1(k) under the Securities Exchange Act of 1934, as amended,

the undersigned hereby agree to the joint filing with each other of the attached

statement on Schedule 13G and to all amendments to such statement and that such statement

and all amendments to such statement are made on behalf of each of them.

IN WITNESS WHEREOF, the undersigned have executed this agreement on October 8, 2014.

Franklin Resources, Inc.

Charles B. Johnson

Rupert H. Johnson, Jr.

Franklin Advisers, Inc.

By: /s/MARIA GRAY

Maria Gray

Vice President and Secretary of Franklin Resources, Inc.

Attorney in Fact for Charles B. Johnson pursuant to Power of Attorney attached to

this Schedule 13G

Attorney in Fact for Rupert H. Johnson, Jr. pursuant to Power of Attorney

attached to this Schedule 13G

Secretary of Franklin Advisers, Inc.

Franklin Strategic Series on behalf of

Franklin Small Cap Growth Fund

By: /s/LORI A. WEBER

Lori A. Weber

Vice President and Assistant Secretary of Franklin Strategic Series

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EXHIBIT B

LIMITED POWER OF ATTORNEY

FOR

SECTION 13 REPORTING OBLIGATIONS

Know all by these presents, that the undersigned hereby makes, constitutes and

appoints each of Robert Rosselot and Maria Gray, each acting individually, as the

undersigned's true and lawful attorney in fact, with full power and authority as

hereinafter described on behalf of and in the name, place and stead of the undersigned

to:

(1) prepare, execute, acknowledge, deliver and file Schedules 13D and 13G (including

any amendments thereto or any related documentation) with the United States Securities

and Exchange Commission, any national securities exchanges and Franklin Resources, Inc.,

a Delaware corporation (the "Reporting Entity"), as considered necessary or advisable

under Section 13 of the Securities Exchange Act of 1934 and the rules and regulations

promulgated thereunder, as amended from time to time (the "Exchange Act"); and

(2) perform any and all other acts which in the discretion of such attorney in fact

are necessary or desirable for and on behalf of the undersigned in connection with the

foregoing.

The undersigned acknowledges that:

(1) this Limited Power of Attorney authorizes, but does not require, each such

attorney in fact to act in their discretion on information provided to such

attorney in fact without independent verification of such information;

(2) any documents prepared and/or executed by either such attorney in fact on behalf of

the undersigned pursuant to this Limited Power of Attorney will be in such form and will

contain such information and disclosure as such attorney in fact, in his or her

discretion, deems necessary or desirable;

(3) neither the Reporting Entity nor either of such attorneys in fact assumes (i) any

liability for the undersigned's responsibility to comply with the requirements of the

Exchange Act or (ii) any liability of the undersigned for any failure to comply with such

requirements; and

(4) this Limited Power of Attorney does not relieve the undersigned from responsibility

for compliance with the undersigned's obligations under the Exchange Act, including

without limitation the reporting requirements under Section 13 of the Exchange Act.

The undersigned hereby gives and grants each of the foregoing attorneys in fact full

power and authority to do and perform all and every act and thing whatsoever requisite,

necessary or appropriate to be done in and about the foregoing matters as fully to all

intents and purposes as the undersigned might or could do if present, hereby ratifying

all that each such attorney in fact of, for and on behalf of the undersigned, shall

lawfully do or cause to be done by virtue of this Limited Power of Attorney.

This Limited Power of Attorney shall remain in full force and effect until revoked by

the undersigned in a signed writing delivered to each such attorney in fact.

IN WITNESS WHEREOF, the undersigned has caused this Limited Power of Attorney to be

executed as of this 30th day of April, 2007

/s/Charles B. Johnson

Signature

Charles B. Johnson

Print Name

LIMITED POWER OF ATTORNEY

FOR

SECTION 13 REPORTING OBLIGATIONS

Know all by these presents, that the undersigned hereby makes, constitutes and

appoints each of Robert Rosselot and Maria Gray, each acting individually, as the

undersigned's true and lawful attorney in fact, with full power and authority as

hereinafter described on behalf of and in the name, place and stead of the undersigned

to:

(1) prepare, execute, acknowledge, deliver and file Schedules 13D and 13G (including

any amendments thereto or any related documentation) with the United States Securities

and Exchange Commission, any national securities exchanges and Franklin Resources, Inc.,

a Delaware corporation (the "Reporting Entity"), as considered necessary or advisable

under Section 13 of the Securities Exchange Act of 1934 and the rules and regulations

promulgated thereunder, as amended from time to time (the "Exchange Act"); and

(2) perform any and all other acts which in the discretion of such attorney in fact

are necessary or desirable for and on behalf of the undersigned in connection with the

foregoing.

The undersigned acknowledges that:

(1) this Limited Power of Attorney authorizes, but does not require, each such

attorney in fact to act in their discretion on information provided to such

attorney in fact without independent verification of such information;

(2) any documents prepared and/or executed by either such attorney in fact on behalf of

the undersigned pursuant to this Limited Power of Attorney will be in such form and will

contain such information and disclosure as such attorney in fact, in his or her

discretion, deems necessary or desirable;

(3) neither the Reporting Entity nor either of such attorneys in fact assumes (i) any

liability for the undersigned's responsibility to comply with the requirements of the

Exchange Act or (ii) any liability of the undersigned for any failure to comply with such

requirements; and

(4) this Limited Power of Attorney does not relieve the undersigned from responsibility

for compliance with the undersigned’s obligations under the Exchange Act, including

without limitation the reporting requirements under Section 13 of the Exchange Act.

The undersigned hereby gives and grants each of the foregoing attorneys in fact full

power and authority to do and perform all and every act and thing whatsoever requisite,

necessary or appropriate to be done in and about the foregoing matters as fully to all

intents and purposes as the undersigned might or could do if present, hereby ratifying

all that each such attorney in fact of, for and on behalf of the undersigned, shall

lawfully do or cause to be done by virtue of this Limited Power of Attorney.

This Limited Power of Attorney shall remain in full force and effect until revoked by

the undersigned in a signed writing delivered to each such attorney in fact.

IN WITNESS WHEREOF, the undersigned has caused this Limited Power of Attorney to be

executed as of this 25th day of April , 2007

/s/ Rupert H. Johnson, Jr.

Signature

Rupert H. Johnson, Jr.

Print Name

CUSIP NO. 630077105 13G
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EXHIBIT C

Franklin Advisers, Inc. Item 3
Classification: 3(e)

Franklin Templeton Portfolio Advisors, Inc. Item 3
Classification: 3(e)

Fiduciary Trust Company International Item 3
Classification: 3(b)

Footnote to Schedule 13G

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[1] Franklin Templeton Portfolio Advisors, Inc. (“FTPA”) may beneficially own these

securities pursuant to various separately managed account investment management

arrangements. Under these arrangements, underlying clients may, from time to time,

delegate to FTPA the power to vote such securities, in which case FTPA has sole

voting power. To the extent that the underlying client retains voting power over any

securities, FTPA disclaims any power to vote or direct the vote of such securities.