

APPLIED OPTOELECTRONICS, INC.

Form SC 13G/A

February 16, 2016

SECURITIES
AND
EXCHANGE
COMMISSION
Washington,
D.C. 20549

SCHEDULE
13G/A

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

Applied
Optoelectronics,
Inc.
(Name of Issuer)

Common stock,
\$0.001 par value
(Title of Class of
Securities)

03823U102
(CUSIP
Number)

December 31,
2015
(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)

(Page 1 of 16
Pages)

*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).

| | |
|----------|--|
| 1 | NAME OF REPORTING PERSON |
| 2 | Ardsley Partners Fund II, L.P. CHECK THE APPROPRIATE BOX IF A MEMBER (b) " OF A GROUP |
| 3 | SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION |
| 4 | Delaware |
| 5 | SOLE VOTING POWER |
| 6 | 0 SHARED VOTING POWER |
| 7 | 496,800 SOLE DISPOSITIVE POWER |
| 8 | 0 SHARED DISPOSITIVE POWER |
| 9 | 496,800 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON |

496,800

CHECK BOX

IF THE

AGGREGATE

AMOUNT IN ..

10

ROW (9)

EXCLUDES

CERTAIN

SHARES

PERCENT OF

CLASS

REPRESENTED BY

11

AMOUNT IN ROW

(9)

3.0%

TYPE OF

REPORTING

12

PERSON

PN

| | |
|--|--|
| | NAME OF REPORTING PERSON |
| 1 | Ardsley Partners Institutional Fund, L.P. |
| | CHECK THE APPROPRIATE BOX IF A MEMBER (b) " OF A GROUP |
| 2 | |
| 3 | SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION |
| 4 | Delaware |
| | SOLE VOTING POWER |
| 5 | |
| | 0 SHARED VOTING POWER |
| 6 | |
| NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH: | 403,200 |
| 7 | SOLE DISPOSITIVE POWER |
| | 0 SHARED DISPOSITIVE POWER |
| 8 | |
| 9 | 403,200 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON |

| | |
|----|--|
| 10 | 403,200 CHECK BOX IF THE AGGREGATE AMOUNT IN .. ROW (9) EXCLUDES CERTAIN SHARES PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) |
| 11 | |
| 12 | 2.4% TYPE OF REPORTING PERSON PN |

| | |
|--|--|
| | NAME OF REPORTING PERSON |
| 1 | Ardsley Partners Advanced Healthcare Fund, L.P. |
| | CHECK THE APPROPRIATE BOX IF A MEMBER (b) " OF A GROUP |
| 2 | |
| 3 | SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION |
| 4 | Delaware |
| | SOLE VOTING POWER |
| 5 | |
| | 0 SHARED VOTING POWER |
| 6 | |
| NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH: | 205,000 |
| 7 | SOLE DISPOSITIVE POWER |
| | 0 SHARED DISPOSITIVE POWER |
| 8 | |
| 9 | 205,000 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON |

205,000
CHECK BOX
IF THE
AGGREGATE
AMOUNT IN ..
10 ROW (9)
EXCLUDES
CERTAIN
SHARES
PERCENT OF
CLASS
11 REPRESENTED BY
AMOUNT IN ROW
(9)

1.2%
TYPE OF
REPORTING
12 PERSON

PN

| | |
|--|--|
| | NAME OF REPORTING PERSON |
| 1 | Ardsley Partners US Equity UCITS Fund plc |
| | CHECK THE APPROPRIATE BOX IF A MEMBER (b) " OF A GROUP |
| 2 | |
| 3 | SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION |
| 4 | New York |
| | SOLE VOTING POWER |
| 5 | |
| | 0 SHARED VOTING POWER |
| 6 | |
| NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH: | 0 SOLE DISPOSITIVE POWER |
| 7 | |
| | 0 SHARED DISPOSITIVE POWER |
| 8 | |
| 9 | 0 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON |

0
CHECK BOX
IF THE
AGGREGATE
AMOUNT IN ..
10 ROW (9)
EXCLUDES
CERTAIN
SHARES
PERCENT OF
CLASS
REPRESENTED BY
11 AMOUNT IN ROW
(9)

0%
TYPE OF
REPORTING
12 PERSON

PN

| | |
|----------|--|
| 1 | NAME OF REPORTING PERSON |
| 2 | Ardsley Ridgecrest Partners Fund, L.P. CHECK THE APPROPRIATE BOX IF A MEMBER (b) " OF A GROUP |
| 3 | SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION |
| 4 | New York |
| 5 | SOLE VOTING POWER |
| 6 | 0 SHARED VOTING POWER |
| 7 | 0 SOLE DISPOSITIVE POWER |
| 8 | 0 SHARED DISPOSITIVE POWER |
| 9 | 0 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON |

0
CHECK BOX
IF THE
AGGREGATE
AMOUNT IN ..
10 ROW (9)
EXCLUDES
CERTAIN
SHARES
PERCENT OF
CLASS
REPRESENTED BY
11 AMOUNT IN ROW
(9)

0%
TYPE OF
REPORTING
12 PERSON

PN

| | |
|----------|--|
| 1 | NAME OF REPORTING PERSON |
| | Ardsley Advisory Partners |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER (b) " OF A GROUP |
| 3 | SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION |
| | New York |
| 5 | SOLE VOTING POWER |
| 6 | 0 SHARED VOTING POWER |
| 7 | 1,105,000 SOLE DISPOSITIVE POWER |
| 8 | 0 SHARED DISPOSITIVE POWER |
| 9 | 1,105,000 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON |

| |
|-------------------------|
| 1,105,000 |
| CHECK BOX |
| IF THE |
| AGGREGATE |
| AMOUNT IN .. |
| 10 ROW (9) |
| EXCLUDES |
| CERTAIN |
| SHARES |
| PERCENT OF |
| CLASS |
| REPRESENTED BY |
| 11 AMOUNT IN ROW |
| (9) |
| 6.6% |
| TYPE OF |
| REPORTING |
| 12 PERSON |
| PN; IA |

| | |
|--|--|
| 1 | NAME OF REPORTING PERSON |
| 2 | Ardsley Partners I CHECK THE APPROPRIATE BOX IF A MEMBER (b) " OF A GROUP |
| 3 | SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION |
| 4 | New York |
| 5 | SOLE VOTING POWER |
| 6 | 0 SHARED VOTING POWER |
| NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH: | 1,105,000 |
| 7 | SOLE DISPOSITIVE POWER |
| 8 | 0 SHARED DISPOSITIVE POWER |
| 9 | 1,105,000 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON |
| | 1,105,000 |

| | |
|-----------|---|
| 10 | CHECK BOX IF THE AGGREGATE AMOUNT IN .. ROW (9) EXCLUDES CERTAIN SHARES PERCENT OF CLASS |
| 11 | REPRESENTED BY AMOUNT IN ROW (9) |
| 12 | 6.6% TYPE OF REPORTING PERSON PN |

| | |
|--|--|
| 1 | NAME OF REPORTING PERSON |
| | Philip J. Hempleman |
| 2 | CHECK THE APPROPRIATE BOX IF A MEMBER (b) " OF A GROUP |
| 3 | SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION |
| | United States |
| 5 | SOLE VOTING POWER |
| 6 | 50,000 SHARED VOTING POWER |
| NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH: | 1,105,000 SOLE DISPOSITIVE POWER |
| 7 | |
| 8 | 50,000 SHARED DISPOSITIVE POWER |
| 9 | 1,105,000 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON |
| | 1,155,000 |

| | |
|-----------|---|
| 10 | CHECK BOX IF THE AGGREGATE AMOUNT IN .. ROW (9) EXCLUDES CERTAIN SHARES PERCENT OF CLASS |
| 11 | REPRESENTED BY AMOUNT IN ROW (9) |
| 12 | 6.9% TYPE OF REPORTING PERSON IN |

Item 1(a). NAME OF ISSUER

The name of the issuer is Applied Optoelectronics, Inc. (the "Company").

Item 1(b). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES

The Company's principal executive offices are located at 13115 Jess Pirtle Blvd., Sugar Land, TX 77478.

Item 2(a). NAME OF PERSON FILING

This statement is filed by:

- (i) Ardsley Partners Fund II, L.P., a Delaware limited partnership ("AP II"), with respect to the Shares (as defined in Item 2(d) below) directly owned by it;
- (ii) Ardsley Partners Institutional Fund, L.P., a Delaware limited partnership ("Ardsley Institutional"), with respect to the Shares directly owned by it;
- (iii) Ardsley Partners US Equity UCITS Fund plc, an Irish UCITS plc ("Ardsley US Equity"), with respect to the Shares directly owned by it;
- (iv) Ardsley Partners Advanced Healthcare Fund, L.P., a Delaware limited partnership ("Ardsley Advanced"), with respect to the Shares directly owned by it;
- (v) Ardsley Ridgecrest Partners Fund, L.P., a Delaware limited partnership ("Ardsley Ridgecrest"), with respect to the Shares directly owned by it;
- (vi) Ardsley Advisory Partners, a New York general partnership ("Ardsley") which serves as Investment Adviser of AP II, Ardsley Institutional, Ardsley Advanced and Ardsley Ridgecrest and as Sub-Advisor of Ardsley US Equity, with respect to the Shares directly owned by AP II, Ardsley Institutional, Ardsley US Equity, Ardsley Advanced and Ardsley Ridgecrest;
- Ardsley Partners I, a New York general partnership ("Ardsley Partners") which serves as General Partner of AP II, Ardsley Institutional, Ardsley Advanced and Ardsley Ridgecrest, with respect to the Shares owned by AP II, Ardsley Institutional, Ardsley Advanced and Ardsley Ridgecrest; and
- (vii) Philip J. Hempleman ("Mr. Hempleman"), the Managing Partner of Ardsley and Ardsley Partners, with respect to the Shares owned by AP II, Ardsley Institutional, Ardsley US Equity, Ardsley Advanced, Ardsley Ridgecrest and with respect to the Shares owned by certain accounts managed by him directly.

The foregoing persons are hereinafter sometimes collectively referred to as the "Reporting Persons." Any disclosures herein with respect to persons other than the Reporting Persons are made on information and belief after making inquiry to the appropriate party. The filing of this statement should not be construed as an admission that any of the Reporting Persons is, for the purposes of Section 13(d) of the Act, the beneficial owner of the Shares reported herein.

Item 2(b). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE

The address of the business office of each of the Reporting Persons is 262 Harbor Drive, Stamford, Connecticut 06902.

Item 2(c). CITIZENSHIP

AP II, Ardsley Institutional, Ardsley Advanced and Ardsley Ridgecrest are Delaware limited partnerships. Ardsley US Equity is an Irish UCITS plc. Ardsley and Ardsley Partners are New York general partnerships. Mr. Hempleman is a United States citizen.

Item 2(d). TITLE OF CLASS OF SECURITIES

Common stock, par value \$0.001 (the "Shares")

Item 2(e). CUSIP NUMBER

03823U102

Item 3. IF THIS STATEMENT IS FILED PURSUANT TO Rules 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 Act;
- (b) " Bank as defined in Section 3(a)(6) of the Act;
- (c) " Insurance company as defined in Section 3(a)(19) of the Act;
- (d) " Investment company registered under Section 8 of the Investment Company Act of 1940;
- (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) " A non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J);
- (k) " Group, in accordance with Rule 13d-1(b)(1)(ii)(K).

If filing as a non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J), please

specify the type of institution: _____

Item 4. OWNERSHIP

The information required by Items 4(a) – (c) is set forth in Rows 5-11 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each Reporting Person.

The percentages used in this Schedule 13G/A are calculated based upon 16,835,013 Shares reported to be outstanding as of November 3, 2015 in the Company's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2015 filed with the Securities and Exchange Commission on December 21, 2015. The percentages used herein and in the rest of the Schedule 13G/A are based upon such number of Shares outstanding.

Item 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS

Ardsley US Equity and Ardsley Ridgecrest no longer own any Shares.

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 OR CONTROL PERSON

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

Each of the Reporting Persons hereby makes the following certification:

By signing below each Reporting Person certifies that, to the best of his or its 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.

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SIGNATURES

After reasonable inquiry and to the best of his or its knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

DATE: February 16, 2016

ARDSLEY PARTNERS FUND II, L.P.

BY: ARDSLEY PARTNERS I,
GENERAL PARTNER

BY: /s/ Steve Napoli

Steve Napoli
General Partner

ARDSLEY PARTNERS INSTITUTIONAL FUND, L.P.

BY: ARDSLEY PARTNERS I,
GENERAL PARTNER

BY: /s/ Steve Napoli

Steve Napoli
General Partner

Ardley Partners US Equity UCITS Fund plc

BY: ARDSLEY ADVISORY PARTNERS
SUB-ADVISOR

BY: /s/ Steve Napoli

Steve Napoli
Partner

ARDSLEY PARTNERS ADVANCED HEALTHCARE FUND, L.P.

BY: PHILIP J. HEMPLEMAN

GENERAL PARTNER

BY: /s/ Steve Napoli*

Steve Napoli
As attorney in fact for
Philip J. Hempleman

ARDSLEY RIDGECREST PARTNERS FUND, L.P

BY: ARDSLEY PARTNERS I,
GENERAL PARTNER

BY: /s/ Steve Napoli

Steve Napoli

General Partner

ARDSLEY ADVISORY PARTNERS

BY: /s/ Steve Napoli

Steve Napoli

Partner

ARDSLEY PARTNERS I

BY: /s/ Steve Napoli

Steve Napoli

General Partner

PHILIP J. HEMPLEMAN, INDIVIDUALLY

BY: /s/ Steve Napoli*

Steve Napoli

As attorney in fact for

Philip J. Hempleman

* Evidence of Power of Attorney was filed with the Schedule 13G/A filed on February 15, 2006 (Acc-no: 0000902664-06-000895) and is incorporated by reference into this filing.

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EXHIBIT 1

JOINT FILING AGREEMENT
PURSUANT TO RULE 13d-1(k)

The undersigned acknowledge and agree that the foregoing statement on Schedule 13G/A is filed on behalf of each of the undersigned and that all subsequent amendments to this statement on Schedule 13G/A shall be filed on behalf of each of the undersigned without the necessity of filing additional joint filing agreements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning him or it contained herein and therein, but shall not be responsible for the completeness and accuracy of the information concerning the others, except to the extent that he or it knows or has reason to believe that such information is inaccurate.

DATE: February 16, 2016

ARDSLEY PARTNERS FUND II, L.P.

BY: ARDSLEY PARTNERS I,
GENERAL PARTNER

BY: /s/ Steve Napoli
Steve Napoli
General Partner

ARDSLEY PARTNERS INSTITUTIONAL FUND, L.P.

BY: ARDSLEY PARTNERS I,
GENERAL PARTNER

BY : /s/ Steve Napoli
Steve Napoli
General Partner

Ardley Partners US Equity UCITS Fund plc

BY: ARDSLEY ADVISORY PARTNERS
SUB-ADVISOR

BY: /s/ Steve Napoli
Steve Napoli
Partner

ARDSLEY PARTNERS ADVANCED HEALTHCARE FUND, L.P.

BY: PHILIP J. HEMPLEMAN

GENERAL PARTNER

BY: /s/ Steve Napoli*

Steve Napoli

As attorney in fact for

Philip J. Hempleman

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ARDSLEY RIDGECREST PARTNERS FUND, L.P
BY: ARDSLEY PARTNERS I,
GENERAL PARTNER

BY: /s/ Steve Napoli

Steve Napoli

General Partner

ARDSLEY ADVISORY PARTNERS

BY: /s/ Steve Napoli

Steve Napoli

Partner

ARDSLEY PARTNERS I

BY: /s/ Steve Napoli

Steve Napoli

General Partner

PHILIP J. HEMPLEMAN, INDIVIDUALLY

BY: /s/ Steve Napoli*

Steve Napoli

As attorney in fact for

Philip J. Hempleman

* Evidence of Power of Attorney was filed with the Schedule 13G/A filed on February 15, 2006 (Acc-no: 0000902664-06-000895) and is incorporated by reference into this filing.