

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

October 21, 2010

National Corporate Research Ltd. As Agent for SemiLEDs Corporation 615 South DuPont Highway Dover, DE 19901

Re: SemiLEDs Corporation

Amendment No. 3 to Registration Statement on Form S-1

Filed October 6, 2010 File No. 333-161052

Ladies and Gentlemen:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Prospectus

1. Please expand your response to prior comment 2 to disclose your ownership interest in the Malaysia and Taiwan joint ventures.

Risk Factors, page 12

We may not be successful in expanding..., page 20

2. It is unclear from your response to the second bullet point of prior comment 7 and your revisions to pages 4 and 96 – 97 of your registration statement whether in weighing the benefits versus the risks of your litigation strategy you have considered the loss of revenues and income that you may suffer from the combined effect of (i) possible infringement in the countries in which you choose to operate and (ii) your unwillingness

to market your products outside those limited countries with an acceptable risk profile. Please clarify.

The marketing and distribution efforts..., page 22

3. Please note that we may have further comments after you file the distribution agreement with Internatix. In addition, please confirm that, other than the currently disclosed agreements with Nanoteco and Internatix, you have no additional material distribution and supply agreements.

We may undertake joint ventures..., page 26

4. Please reconcile the third sentence in this risk factor with your response to prior comment 2 where you indicate that it is not your general strategy to rely on joint venture arrangements.

We are a multinational organization..., page 29

5. We note your response to prior comment 11. However, it remains unclear why you removed disclosure related to the uncertainty of tax laws that may have a material impact on your company. Please restore this risk factor and provide appropriate tax opinions or provide an expanded analysis as to why you are not required to do so. With respect to the tax opinion(s), please note that the presence or absence of direct additional taxes on the company's shareholders is not determinative of whether a tax opinion is required.

Liquidity and capital resources, page 79

6. We note that you have not described the material terms of your loan agreements, filed as exhibits 10.22 to 10.24, and your Agreement for Issuance of Overseas Letter of Credit, filed as exhibit 10.17. Please advise.

Industry, page 84

Increased LED Performance, page 84

7. Please tell us how the data in Annex A that you provided in response to prior comment 19 supports your statement in this section that LED "is becoming increasingly competitive with respect to energy savings."

Business, page 88

Competitive Manufacturing Cost Structure, page 89

8. It is unclear from your revisions to prior comment 20 the extent to which you can reuse sapphires. Given that this is one of your key strengths, your disclosure should clearly indicate the level of advantage that this technology provides. We therefore reissue our comment.

Expand our Manufacturing Capacity..., page 91

- 9. We note your response to prior comment 22. Please revise this section or under "Facilities" on page 100 to disclose that 70% of your current facilities are devoted to manufacturing operations. In addition, please disclose, as indicated in your response, that you do not expect to have to purchase or lease additional facilities for corporate or manufacturing use in Taiwan for at least the next twelve months.
- 10. We note your revisions in response to prior comment 23; however, it is unclear how a prospective investor can evaluate the significance of your expansion strategy without disclosure of added capacity. Please disclose capacity to be added from your planned expansion.

Facilities, page 100

11. Please disclose the amount of your rent as well as any other material terms of your leases. With regard to the Luxxon lease, you may wish to cross-reference your disclosure under "Certain Relationship and Related Transactions" on page 128.

Sales by China SemiLEDs and Taiwan..., page 103

- 12. Please disclose the substance of the last two sentences of your response to prior comment 26. In addition:
 - with regard to your added disclosure in the first full sentence of page 104, provide examples of the "individual situations" you refer to;
 - with regard to the fifth paragraph on page 102 and your response to prior comment 42, clarify the reason for entering into a joint venture in order to sell chips to a specific customer instead of selling chips directly to this customer; and
 - tell us where you have disclosed the information contained in the third-to-last paragraph of your response to comment 55 of your letter dated September 14, 2010.

Board of Directors of China SemiLEDs, page 104

13. We note your response to prior comment 28; however, the formula by which you determine the number of directors that you may appoint remains unclear. Please clarify.

Management, page 107

14. Please fully account for the business experience of your management during the past five years. We note, for example, that it appears there are gaps in the biographies of Mr. Beck and Ms. Chin.

Executive Compensation, page 112

15. Your response to prior comment 30 repeats your response to comment 61 in your letter dated September 14, 2010. Please tell us why you cannot make the determination required under Item 402(s) of Regulation S-K and when you intend to make such determination.

Base Salaries, page 113

16. Your added disclosure in response to prior comment 31 indicates that the semiconductor industry was used as a reference point for the LED industry. It is unclear how companies in the semiconductor industry are considered "similar companies" as you state in the fourth sentence of this section. Please revise or advise.

Warranty Agreement, page 127

17. We note your response to prior comment 35. With a view to disclosure, please tell us which liabilities and obligations of Taiwan SemiLEDs survive the expiration or termination of the agreement, and for how long.

<u>Intellectual Property Cross-Licensing..., page 128</u>

- 18. We note your response to prior comment 36 and reissue. Please disclose the material terms, including duration, of your related party agreements as required by Item 404 of Regulation S-K.
- 19. We note your description of the patent cross-license agreement. Please disclose whether patents acquired by China SemiLEDs and licensed to you or your affiliates for use in manufacturing or selling LED chip or packages will be royalty-free, exclusive and non-transferrable.
- 20. We note your disclosure in the last sentence of the first full paragraph on page 129. Given the broad exceptions noted in that sentence, please clarify the circumstances in which the termination right would be triggered (e.g., an amendment to the Promoters Agreement).

Effects of Certain Provisions, page 135

21. We note your response to prior comment 38. We may have additional comment after you file your amended and restated bylaws.

Index to Consolidated Financial Statements, page F-1

22. We note your response to prior comment 39. Please revise your filing as indicated within your response to include updated financial statements and related disclosures in your filing in accordance with Rule 3-12 of Regulation S-X.

Notes to Consolidated Financial Statements, page F-7

Note 5. Investments in Unconsolidated Entities, page F-17

- 23. We note your response to prior comment 40. Specifically referring to the response to the fourth bullet point, you state in your response that the general manager is tasked with carrying out the business plans as approved by the Shareholder Group. However, your disclosures on page 104 regarding the management of China SemiLEDS simply refer to the general manager reporting to the Board of Directors. Please revise your disclosures to clarify how the Shareholder Group has oversight over the activities of the general manager.
- 24. We note your response to prior comment 40 and your disclosures on page F-7 and on page F-18. With a view towards enhanced disclosure, please revise your filing to disclose in more detail your basis for not consolidating China SemiLEDS and accounting for your investment in this entity on an equity basis of accounting.
- 25. We note your response to prior comment 41. Please provide us your significance calculations that support that you are not required to provide financial statements pursuant to the requirements of Rule 3-09 of Regulation S-X related to your equity method investment in China SemiLEDs.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Tara Harkins at (202) 551-3639 or Kevin Vaughn, Accounting Branch Chief, at (202) 551-3643 if you have questions regarding comments on the financial statements and related matters. Please contact Gabriel Eckstein at (202) 551-3286 or Daniel Morris, Special Counsel, at (202) 551-3314 if you have any other questions.

Sincerely,

Martin James Acting Assistant Director

cc (via fax): Mark J. Lee

Orrick, Herrington & Sutcliffe LLP