



DIVISION OF
CORPORATION FINANCE

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

February 25, 2011

Jay B. Knoll, Esq.
Executive Vice President, General Counsel and
Chief Administrative Officer
Energy Conversion Devices, Inc.
3800 Lapeer Road
Auburn Hills, Michigan 48326

**Re: Energy Conversion Devices, Inc.
Registration Statement on Form S-3
Filed February 14, 2011
File No. 333-172228**

Dear Mr. Knoll:

We have limited our review of your registration statement to those issues we have addressed in our 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. Where 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.

Exhibit 5.1

1. Please limit the assumption in clause (c) to factual matters.
2. The opinion should also opine that the Warrants and the Subscription Rights will be binding obligations of the company.
3. We note that the opinions expressed are limited to the internal laws of the State of Michigan, the Delaware General Corporation Law and the Federal laws of the United States. Given these limitations, please:

- have counsel confirm to us in correspondence submitted on EDGAR that it concurs with our understanding that the reference and limitation to the “Delaware General Corporation Law” includes the statutory provisions and reported judicial decisions interpreting those laws; and
- file an opinion of counsel who can opine that the Debt Securities to be issued will be validly issued and will constitute valid and binding obligations of the company under New York law, the governing law set forth in the form of each Indenture.

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.

Jay B. Knoll
Energy Conversion Devices, Inc.
February 25, 2011
Page 3

Please contact Tim Buchmiller at (202) 551-3635 with questions.

Sincerely,

Amanda Ravitz
Assistant Director

cc: W. Andrew Jack, Esq.
(via facsimile)