

Mail Stop 4561

November 10, 2009

Philip E. Soran
Chairman, President and Chief Executive Officer
Compellent Technologies, Inc.
7625 Smetana Lane
Eden Prairie, MN 55344

**Re: Compellent Technologies, Inc.
Registration Statement on Form S-3
Filed October 22, 2009
File No. 333-162633**

Dear Mr. Soran:

We have conducted a limited review of your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

General

1. Please revise your registration statement to expressly incorporate by reference your Form 10-Q for the quarterly period ended September 30, 2009, and to provide conforming related disclosure throughout your filing.

Principal and Selling Stockholders, page 26

2. The second footnote to the principal and selling stockholder table states that Mr. Beeler "is deemed to have shared voting and investment power" over the shares of your common stock held by El Dorado Ventures and its affiliated entities. The third footnote contains similar disclosure indicating that Mr. Spreng shares voting and investment power over the shares held by Crescendo Ventures and its affiliated entities. These disclosures suggest that these individuals share voting

and investment power with others. Please also identify the other natural persons who share voting or investment power over the shares being offered for resale by El Dorado Ventures and its affiliated entities and Crescendo Ventures and its affiliated entities; or otherwise revise your footnote disclosure as appropriate. See Question 140.02 of the Division of Corporation Finance Compliance and Disclosure Interpretations on Regulation S-K.

3. Please disclose the individual or individuals who have sole or shared voting and/or investment power with respect to the shares held by Eagle Asset Management, Inc. and by Cargill Incorporated. See Instruction 2 to Item 403 of Regulation S-K and Rule 13d-3 under the Securities Exchange Act of 1934.
4. Please advise whether Eagle Asset Management, Inc. is an affiliate of a broker-dealer. In this regard, we note that Eagle Asset Management's website suggests that it is affiliated with Eagle Fund Distributors, Inc., a registered-broker dealer. For any selling stockholder that is a broker-dealer affiliate, please disclose this information in your filing and clarify whether at the time of the purchase of the securities to be resold, the selling stockholder purchased in the ordinary course of business. In addition, disclose whether such selling stockholder had any agreements, understandings or arrangements, directly or indirectly, with any person to distribute the securities.

Where You Can Find More Information, page 34

5. Further to comment 1 above, you should also incorporate by reference any other periodic or current reports filed prior to the effective date of the registration statement and required to be incorporated by reference, including the Form 8-K filed on November 4, 2009. See Item 12(a)(2) of Form S-3 and Question 123.05 of the Division of Corporation Finance Compliance and Disclosure Interpretations on Securities Act Forms.

Item 16. Exhibits, page II-2

6. We note that you intend to file certain exhibits to your registration statement by amendment. In particular, we refer to the form of underwriting agreement and the legal opinion that you intend to file as Exhibits 1.1 and 5.1, respectively. Please be advised that we will need sufficient time prior to requested effectiveness of the registration statement to review and provide any comments on these exhibits.

As appropriate, please amend your registration statement in response to these comments. Your responsive amendment should also include a marked copy of the amended filing that conforms with the provisions of Rule 310 of Regulation S-T. Marked copies such as those in HTML format that show changes within paragraphs help us to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover

letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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 all information required under the Securities Act of 1933 and that they have provided all information investors require for an informed investment decision. 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 the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

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. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rule 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

Mr. Philip E. Soran
Compellent Technologies, Inc.
November 10, 2009
Page 4

Please contact Katherine Wray at (202) 551-3483 with any questions. If you require further assistance you may contact me at (202) 551-3462 for additional assistance. You may also contact the Assistant Director, Barbara C. Jacobs, if you thereafter have any other questions.

Sincerely,

Mark P. Shuman
Branch Chief – Legal

cc: Via Facsimile (650) 849-7400
John T. McKenna, Esq.
Cooley Godward Kronish LLP