

Mail Stop 6010

May 17, 2006

André DiMino, Chairman  
Ivivi Technologies, Inc.  
224-S Pegasus Avenue  
Northvale, NJ 07647

**Re: Ivivi Technologies, Inc.  
Amendment No. 3 to Registration Statement on Form SB-2  
Filed April 20, 2005  
File No. 333-122768**

Dear Mr. DiMino:

We have reviewed 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 supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not 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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

General

1. We note disclosure throughout the registration statement of your December 2004, February and November 2005 and March 2006 private placements of unsecured convertible notes. We note further in Section 2 of Exhibit 4.4 that the holders of certain of these notes may elect to receive interest payments in cash or in shares. We also refer you to your response to prior comment 30. Please confirm in your response letter that note holders are *not* proposing to sell shares of common stock under the registration statement they would acquire upon conversion of amounts due them resulting from accrued interest. Please also revise your registration statement to make it clear that you are not registering such shares and that the prospectus may not be used to sell such shares.

2. When required to update the financial statements to comply with Item 310(g) of Regulation S-B, please also ensure that corresponding updates are made throughout the prospectus to reflect the latest financial results for the fiscal year ended March 31, 2006. We note, for example, that Dilution and Capitalization disclosures are as of December 31, 2005.
3. We remind you that we have not received your response to our comments to your confidential treatment application. Please confirm your understanding that those comments must be resolved prior to our acting upon a request for acceleration of effectiveness of this registration statement.

#### Explanatory Note

4. Please revise to reflect that the prospectus relating to the resale of your common stock also includes shares of common stock issuable upon conversion of your convertible promissory notes, as indicated on the alternate pages for the selling security holder prospectus.

#### Table of Contents

5. You are responsible for the accuracy and adequacy of disclosure in your registration statement. However, the second and third sentences of the last paragraph on this page appear to suggest that investors are not entitled to rely on such information. Such disclaimer of responsibility for information in a prospectus is inappropriate. Please revise or remove the information.

#### Prospectus Summary, page 1

6. Your prospectus summary should not simply copy or restate language that appears elsewhere in the prospectus (e.g., the "Business" section). The introductory sections of the prospectus are intended to briefly summarize the prospectus and to provide context for the disclosure contained in the rest of the registration statement. We note that certain language is almost identical to language on pages 42 and 43 of the Business section. Please revise the summary to provide a more concise description of the company and the offering.
7. Please update your disclosure to reflect more current market data. For example, in the bullet point referenced above, you cite 2008 market projections based on August 2004 data and describe the advanced wound care market based on 2003 revenues.

8. Please revise your disclosure to ensure that the meaning of all technical and industry-specific terms are clear from the context of your discussion. We note, for example, the reference to “bioresorbable fixation” on page 3.

Risk Factors – Page 8

We have a history of significant and continued operating losses....., page 8

9. Please expand your disclosure to include your accumulated deficit as of March 31, 2006.

Sales of substantial amounts of our common stock may occur....., page 19

10. Please revise your disclosure here and throughout the filing to calculate the number of shares that will be outstanding as of the anticipated closing date of this offering. We note that your current disclosure assumes a closing date in April 2006.

Use of Proceeds, page 25

11. Please revise to disclose the amount payable to ADM Tronics as of March 31, 2006 and the amount of net proceeds from this offering that will be used to repay this obligation. We note that the \$2.5 million was the amount payable to ADM Tronics as of December 31, 2005.

Dilution, page 31

12. Please reconcile the per share dilution data in the first paragraph of this section with the disclosure in the table.

Management’s Discussion and Analysis of Financial Condition and Results of Operation, Page 32

Overview, page 32

13. We refer you to your disclosure in the penultimate paragraph on page 33. Please describe in greater detail your efforts to obtain CMS clearance for the reimbursement of home health use of your products.

Nine Months Ended December 31, 2005 Compare to Nine Months Ended December 31, 2004, page 37

14. Revise to provide all disclosures specified by Item 303 (b) of Regulation S-B. Where changes in line items are the result of more than one factor and/or offsetting factors, the impact of each individually significant factor should be quantified to the extent practicable. For example, please specifically quantify the factors that lead to increased revenues and cost of revenues. Apply this comment throughout MD&A as applicable.

Liquidity and Capital Resources, page 39

15. We note your disclosure on page 41 that you “were in material compliance with the covenants contained in the notes.” Please revise the filing to tell the reader more about these covenants and your non-compliance. Specifically, please address what covenants were failed and the recourse your debt holders’ had due to your non-compliance. In the event you were in compliance with all covenants, please revise the disclosure to state that conclusion definitively.

Changes in and Disagreements with Accountants on Accounting and Financial Disclosure, page 41

16. Please update us as to the implementation status of the remediation efforts mentioned on page 41.

Business, page 42

General

17. Throughout this section you make references to “our technology” and “our PEMF technology.” For example, we note your statement in the first full paragraph on page 49 that the “therapeutic value of *our technology* has been demonstrated in the wound care market” (*emphasis added*). Please clarify, where such references appear, whether you are referring specifically to your products or more broadly to all products utilizing PEMF technology.

Business Overview, page 42

18. We refer you to your disclosure in the last full paragraph on page 42. Please clarify whether your “active pursui[t]” of exclusive arrangements have actually resulted in actual agreements with strategic partners, aside from the mentioned agreement with the Canadian distributor. Your current disclosure suggests that

you have several agreements with strategic partners. Ensure that all such material strategic agreements have been filed as exhibits to the registration statement.

Future Markets – Page 44

19. We note your disclosure of the clinical trial at Cleveland Clinic Florida. Please tell us whether you still expect this study to be completed during 2006 and disclose any preliminary results regarding the efficacy of your products in particular.

Our Strategy, page 45

20. Please clarify whether the Roma<sup>3</sup> and the Torino II are currently commercially viable products.
21. We note your disclosure in the last paragraph on page 46 that you have “engaged” 11 third-party distributors. Please clarify whether you have formalized distribution agreements with each of these distributors and ensure that all material distribution agreements have been filed as exhibits.

Potential New Markets and Applications, page 51

Pain Relief, page 53

22. Please tell us when you plan to file your clearance application with the FDA to enter the pain relief market and tell us whether you still anticipate obtaining such clearance by the end of 2006.

Hair Loss Reduction, page 54

23. It is unclear from your disclosure exactly what treatment your products have been approved to provide. Please clarify.

Research Studies, page 54

Research and Development, page 54

24. Please explain the significance of Dr. Casper’s \$270,000 NIH grant to commence research studies. Clarify whether such studies will be conducted specifically to research the effectiveness of your products.

25. Please avoid the use of such vague language as “we may commence additional studies” or “we may enter into joint ventures.” Describe any such future plans in more clear terms or, if you have no such concrete plans, specifically state so.
26. Please tell us whether Dr. Casper’s continued research since the expiration of your sponsored research agreement is pursuant to a new research agreement, and if so, describe the material terms of this agreement and tell us why it has not been filed as an exhibit.
27. Please tell us why you have not filed your Master Clinical Trial Agreement with Cleveland Clinic Florida. Disclose the amounts you expect to pay Cleveland Clinic Florida over the term of the agreement.

Legal Proceedings, page 67

28. Please update us as to the status of the described legal proceedings.

Management – Page 69

Executive Compensation – Page 70

29. Please update to provide executive compensation disclosure for the fiscal year ended March 31, 2006.

Employment Agreements, page 79

30. Please file as exhibits your employment agreements with your named executive officers and key employees/ consultants.

Certain Relationships and Related Transactions, page 86

31. Please disclose the names of the shareholders who are party to the Voting Agreement and to the Share Purchase Agreement, and file these agreements with your next amendment. We may have further comment upon our review.

Financial Statements, page F-1

32. The financial statement should be updated, as necessary, to comply with Item 310(g) of Regulation S-B at the effective date. Please revise to comply or tell us why such update is not required.

Financial Statements as of March 31, 2005 and 2004, page F-13

Note 1. Organizational Matters, page F-18

Going Concern, page F-18

33. Please revise to provide more specific details of your viable plan of operations as required by FRC 607.02, including plans and timeframes to fully develop all products and services and expected financing needs and sources. You should also discuss the expected impact if you are not able to raise the necessary financing. Additional disclosure should be included in MD&A.

Note 2. Significant Accounting Policies, page F-18

Revenue Recognition, page F-19

34. Please revise your revenue recognition policy to refer to the criteria for revenue recognition outlined in SAB 104. Clearly describe any post shipment obligations, including customer acceptance, training, installation, etc., and explain when you recognize revenue in those instances. Separately disclose your policy for recognizing revenue from each type of product or service you provide to customers. We note that a majority of your revenues are from equipment rentals. Please revise the filing to discuss the agreements or arrangement under which you rent equipment, including the term, cancellation provision, and renewals. Additionally, please also revise the filing to disclose the minimum future rentals on noncancelable agreements. Refer to paragraphs 23(b) and 23(c) of SFAS 13.

Advertising Costs, page F-19

35. We see that you capitalized the cost of your sponsorship of the PBS promotional medical program until completion of the program, at which time the capitalized costs were expensed. Please tell us your accounting basis for capitalizing the costs of the advertising program until its completion. Include in your response a discussion of why the sponsorship was not expensed the first time the program aired. Please refer to SOP 93-7 in your response.

Note 6. Private Placement of Convertible Debt, page F-25

36. We note that you have issued convertible promissory notes in December 2004, February 2005, November 2005 and March 2006. We also see that you may incur liquidated damages or penalties pursuant to registration rights agreements. Please refer to the guidance provided in the Division of Corporation Finance's Current Accounting and Disclosure Issues Outline at

<http://www.sec.gov/divisions/corpfin/acctdis120105.pdf> and address the following:

- Please revise the filing to clearly disclose all the material terms of the convertible promissory note and warrants, including but not limited to, the conditions under which you or the holder may convert into common shares, the conversion rate and all conditions that may result in adjustments to that rate, any conditions under which you or the holder may accelerate payment of the notes. Likewise, please clearly describe the material terms of the registration rights agreements, including the conditions under which you would be required to pay liquidated damages.
- Tell us how you have considered the guidance provided in EITF 05-4 *The Effect of a Liquidated Damages Clause on a Freestanding Financial Instrument Subject to Issue No. 00-19* in concluding how to account for these instruments. While we note that the EITF has not reached a consensus on this issue and has deferred deliberation until the FASB addresses certain questions which could impact a conclusion on this issue, please tell us how you considered the guidance in EITF 05-4 and the different views on this issue as outlined in Issue Summary No. 1 to EITF 05-4 in analyzing the registration rights agreement and in considering whether you are required to bifurcate the conversion option from the debt host.
- Tell us how you have applied the guidance in EITF Issue 00-19 in evaluating whether the various features of your convertible promissory notes, including for example, the conversion features, the increasing interest rate feature, etc., are embedded derivatives that you should separate from the debt host, record as liabilities and account for at fair value under SFAS 133. In this regard, please specifically address whether the convertible promissory notes meet the definition of conventional convertible debt in paragraph 4 of EITF Issue 00-19. Please provide us with your analysis of all of the convertible promissory note features under paragraphs 12-32 of EITF 00-19.
- Revise the financial statements to describe clearly how you have accounted for the convertible promissory note, including any related discounts and any embedded derivatives requiring bifurcation pursuant to SFAS 133.
- Revise the Critical Accounting Estimates section of MD&A to disclose the methodology and significant estimates used to value any of the instruments you carry at fair value.

In addition, it appears that the warrants and options issued in conjunction with the convertible promissory notes are also subject to registration rights agreements. As a result, we note the accounting and classification of these freestanding instruments may also be impacted depending on your view as to the appropriate accounting for the instruments under EITF 00-19 and your consideration of EITF 05-4. Please advise.



Note 7. Stockholders' Equity Transactions, page F-25

37. Provide us with an itemized chronological schedule detailing each issuance of your common shares, stock options and warrants since March 2005 through the date of your response. Include the following information for each issuance or grant date:

- Number of shares issued or issuable in the grant
- Purchase price or exercise price per share
- Any restriction or vesting terms
- Management's fair value per share estimate
- How management determined the fair value estimate
- Identity of the recipient and relationship to the company
- Nature and terms of any concurrent transactions with the recipient
- Amount of any recorded compensation element and accounting literature relied upon to support the accounting.

In the analysis requested above, highlight any transactions with unrelated parties believed by management to be particularly evident of an objective fair value per share determination. Please provide us with a chronological bridge of management's fair value per share determinations to the current estimated IPO price per share. Also, indicate when discussions were initiated with your underwriter(s) about possible offering price ranges. We may have further comment after reviewing your response.

38. For issuances of stock for services rendered, please revise the filing to clearly identify whether the issuances were based on the fair market value of the stock issued or the fair value of services provided. For issuances that are based on the fair market value of the stock issued, please clearly describe how the fair value was determined as there was no public market for your common stock.

Alternate Pages For Selling Shareholder Prospectus

Selling Security Holders – Page A-3

39. We reissue prior comments 101 and 102 from our comment letter dated March 11, 2005.

Part II

Item 27. Exhibits and Financial Statements

Exhibit 16.3

40. Please revise the filing to present the letter from Stonefield Josephson, Inc. in compliance with Item 304(a)(3) of Regulation S-B.

Item 28. Undertakings, page II-7

41. Please include the undertaking set forth in Item 512(a) of Regulation S-B, as revised by Release 33-8591.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental 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 filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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.

You may contact Kevin Kuhar at (202) 551-3662 or Lynn Dicker at (202) 551-3616 if you have questions regarding comments on the financial statements and related matters. Please contact Adelaja Heyliger at (202) 551-3636 or me at (202) 551-3444 with any other questions.

Sincerely,

Perry Hindin  
Special Counsel

cc (via fax): Steven M. Skolnick, Esq.  
Lowenstein Sandler PC  
973.597.2477