

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

August 31, 2010

Via U.S. Mail and Facsimile

Mario A. Rivas President and Chief Executive Officer Anadigics, Inc. 141 Mt. Bethel Road Warren, NJ 07059

Re: Anadigics, Inc.

Form 10-K for the fiscal year ended December 31, 2009

Filed March 12, 2010 File No. 000-25662

Dear Mr. Rivas:

We have reviewed your filing 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 within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. 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 filing and the information you provide in response to these comments, we may have additional comments.

1. It appears you have effective registration statements on Form S-3 that purport to register offerings by you of multiple classes of securities up to a specified dollar amount. Please tell us how you complied with the undertaking you included pursuant to Regulation S-K Item 512(a) to deregister unsold securities at the termination of those offerings. See Rule 415(a)(5) of Regulation C.

Cover Page

2. Given that your common stock is listed on the NASDAQ Global Market, it appears that class of securities is registered under Section 12(b), rather than Section 12(g), of the Exchange Act. Also, given the Exchange Act registration statement you filed on

Mario A. Rivas Anadigics, Inc. August 31, 2010 Page 2

December 23, 1998, it appears your preferred stock purchase rights are also registered under the Exchange Act. Please revise future filings, as applicable.

Item 11. Executive Compensation

3. We note that you have not included any disclosure in response to Item 402(s) of Regulation S-K. Please advise us of the basis for your conclusion that disclosure is not necessary and describe the process you undertook to reach that conclusion.

Definitive Proxy Statement on Schedule 14A

4. From your disclosure here, the nature of the diversity you consider is unclear. Please tell us and revise future filings to clarify how you implement your consideration of diversity and how you evaluate its effectiveness.

Compensation Discussion and Analysis

Executive Compensation Objectives and Philosophy

- 5. Please tell us, and revise future filings to clarify, how you determine the total compensation to award your named executive officers, as well as the amount of each element you pay. In this regard:
 - You indicate in the seventh paragraph of this section that you seek to set aggregate compensation at the median of peer companies. However, you indicate two paragraphs later that total compensation should be benchmarked at the 75th percentile of compensation surveys and data. Please reconcile. If you tie total compensation, or any material element of compensation, to benchmark information, such as comparator companies, your response and revised disclosure in future filings should clearly identify the benchmark and its components, including the names of comparator companies and explain how the compensation you pay relates to that benchmark. See Item 402(b)(1)(xiv) of Regulation S-K;
 - If total compensation or a component of compensation is targeted at a specific
 percentile of a benchmark, as indicated by your disclosure, please include an analysis
 of where actual payments fell relative to the target. Also, if any of your named
 executive officers are compensated at levels that are materially different from the
 targeted levels of compensation, please also provide discussion and analysis as to
 why;
 - You mention factors you consider in setting base salaries, but it is unclear what factors you consider in determining the amounts of the other components of compensation you pay or how the factors you cite relate to the benchmark information you mention. It is similarly unclear how the proportion of compensation

Mario A. Rivas Anadigics, Inc. August 31, 2010 Page 3

awarded under a given component relates to the benchmarking data mentioned in your disclosure or to the proportion you award under other components of compensation; and

• It is unclear what about the "unique nature of the analog radio frequency expertise required in" your business requires that total compensation be benchmarked at the 75th percentile.

Components of Compensation

6. We note that you have not disclosed the specific targets to be achieved in order for your named executive officers to earn their respective annual short-term incentive payments. Please provide such disclosure in future filings, as applicable. To the extent that you believe that disclosure of such information, on a historical basis, would result in competitive harm such that the information could be excluded under Instruction 4 to Item 402(b) of Regulation S-K, please provide us with a detailed explanation supporting your conclusion. To the extent that it is appropriate to omit specific targets or performance objectives, you are required to provide appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. Refer also to Question 118.04 of Regulation S-K Compliance and Disclosure Interpretations available on our website at http://www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm. In discussing how difficult or likely it will be to achieve the target levels or other factors, you should provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm.

Short-Term Incentives

7. Please tell us, and revise future filings to clarify, what amounts were awarded under your short-term incentive plan and how those amounts were determined. Include in your response a description of the extent to which each material goal and objective was achieved relative the minimum, target and maximum amounts and any exercise of discretion by your compensation committee.

Grants of Plan-Based Awards Table for Fiscal Year End

8. Given your disclosure regarding short-term incentives, it appears this table should include the columns required by Item 402(d)(2)(iii) or (iv) of Regulation S-K. Please amend your filing accordingly.

Outstanding Equity Awards at Fiscal Year End

9. With a view toward amended disclosure, please tell us why your principal executive officer is not in this table. It appears from the tables on the prior and subsequent pages that he received options in 2009 and that such options were not exercised.

Mario A. Rivas Anadigics, Inc. August 31, 2010 Page 4

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 Exchange Act of 1934 and all applicable Exchange 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.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Gabriel Eckstein at (202) 551-3286 or Geoff Kruczek, Senior Attorney, at (202) 551-3641 if you have any other questions.

Sincerely,

Russell Mancuso Branch Chief