

Room 4561

November 22, 2006

Mr. E. Wayne Jackson, III
Chief Executive Officer
Sourcefire, Inc.
9770 Patuxent Woods Drive
Columbia, Maryland 21046

**Re: Sourcefire, Inc.
Registration Statement on Form S-1 filed October 25, 2006
File No. 333-138199**

Dear Mr. Jackson:

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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Registration Statement on Form S-1

1. We will process this filing and your amendments without price ranges. Since the price range triggers a number of disclosure matters, we will need sufficient time to process the amendment when it is included. Please understand that its effect on disclosure throughout the document may cause us to raise issues on areas not previously commented upon.

2. Please supplementally provide us with copies of any graphical materials or artwork you intend to use in your prospectus. Upon review of such materials, we may have further comments. Please refer to Section VIII of our March 31, 2001 update to our Current Issues and Rulemaking Projects outline for additional guidance.

Prospectus Summary, page 1

3. You state here and elsewhere in the prospectus that you are “a leading provider of intelligence driven, open source network security solutions,” that Snort has “become a de facto industry standard,” and that Martin Roesch, your founder and chief technology officer, is widely regarded as a “network security visionary.” Please provide us support for these claims of your industry position, prominence and Mr. Roesch’s standing. Further, please expand your disclosure to state concisely the basis on which your market leadership claim is made. In your response tell us how you compare to your competitors in quantitative or qualitative terms and consider appropriate disclosure in this respect.
4. We specifically note your statement regarding your belief that “a majority of the Fortune 100 companies and all of the 30 largest U.S. government agencies use Snort technology” and that “Snort is the most widely deployed intrusion prevention technology worldwide.” Please provide us support for your belief in the foregoing. Further, please clarify your reference on page 52 to your measurement metric of “total dollar outlays.”
5. With respect to any third-party statements in your prospectus such as the market information by International Data Corporation presented in this section, please provide us with support for such statements and disclose the date such reports were made. To expedite our review, please clearly mark each source to highlight the applicable portion or section containing the statistic and cross-reference it to the appropriate location in your prospectus. Also, tell us whether the source of each statistic is publicly available without cost or at a nominal expense.
6. We note your disclosure of awards and certifications on pages 3 and 59. Please provide us support for these awards and certifications.
7. We note your use of the term “endpoint” throughout your disclosure. Please clarify your use of such term. In addition, you have characterized “endpoint intelligence” as the “ability to continuously discover characteristics and vulnerabilities of network assets.” Please clarify how endpoint intelligence is differentiated from the network intelligence afforded by your RNA product. Please keep in mind our plain English principles regarding the use of industry jargon and terms unfamiliar to the potential investor.
8. You disclose throughout your intent to selectively pursue acquisitions of complementary businesses, technologies and products. In particular, we note your disclosure on page 47 in which you state that you are “currently not a party to any agreement or letter of intent

with respect to potential investments in, or acquisitions of, businesses, services or technologies,” but that you may enter into such arrangements in the future. Please clarify whether you have any plans, proposals or arrangements with respect to any specific acquisition.

Risk Factors

New competitors could emerge..., page 10

9. We note the disclosure that IBM recently acquired one of your competitors, Internet Security Systems and on page 22 you note that your relationship with IBM may be diminished by this transaction. Your current disclosure does not address the importance of IBM to your operating results and so could be enhanced by addressing the nature of any agreements you have with IBM as well as quantifying, to the extent material, the dollar amount of revenues generated through IBM as a distributor and reseller of your products and services. Tell us what consideration you have made to providing this information. Known uncertainties that are reasonably likely to have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations should be disclosed in your management’s discussion and analysis. See Item 303 of Regulation S-K.

If existing customers do not make subsequent purchases from us..., page 12

10. Please elaborate in qualitative and quantitative terms on the impact that impaired relationships with your largest customers may have on your business. In particular, we note that you mention service revenue and annual maintenance fees from your installed customer base. Please discuss whether any customer comprises a significant share of such recurring revenue in which the loss of such customer would materially affect your revenue. We note your disclosure on page 59 that no customer accounted for over 10 percent of your revenues in 2005.

Our products contain third party open source software..., page 14

11. You disclose that the underlying license agreements for your use of open source programs may “require [you] to make available to the open source user community the source code for [your] modifications and derivative works” and possibly your proprietary software. To the extent material, please expand to discuss whether you previously have made such source code available. Please also elaborate on how the user community undertakes to have you comply with such availability requirement.

Our proprietary rights may be difficult to enforce..., page 15

12. Please elaborate on the circumstances in which you have placed, and may place, source code for your software in escrow and when such source code may be made available to your customers and OEM partners.

Claims that our products infringe the proprietary rights of others..., page 15

13. Please clarify as to whether you have a patent application pending with respect to your RNA technology. If you have filed an application, please elaborate specifically on how the timing of the filing of the patent applications by others regarding similar technology may affect your pending application. In particular, please elaborate on whether the one company you reference is PredatorWatch, whether their application preceded your application and, if so, the ramifications of such timing to your patent application for your RNA technology.

We have been sued by a company claiming that we misappropriated..., page 16

14. Please revise to clarify at the beginning of your discussion whether the technology at issue in the complaint is your RNA technology. Further, please detail the portion of your revenue that you derive from such technology.

We rely on software licensed from other parties..., page 17

15. We note your disclosure that software licensed from third parties are used in your products and your specific mention of MySQL. Please disclose whether your license for MySQL or any other license constitutes a material license that you rely on for your products and detail the material terms of such license. Any such material license would be required to be filed pursuant to Item 601(b)(10)(ii)(B) of Regulation S-K.

Defects, errors or vulnerabilities..., page 17

16. To the extent material, please discuss any prior occurrences in which defects, errors or vulnerabilities have affected your products. Please expand similarly with respect to your following risk factor regarding hackers.

We depend on a single source to manufacture our enterprise class intrusion sensor..., page 18

17. Your specific discussion of Bivio Networks in this risk factor and your disclosure that the products produced by Bivio Networks constituted 18 percent of your product revenue for the nine months ended September 30, 2006 suggests that your business depends to a material extent on your supply arrangement with Bivio Networks. Accordingly, it

appears that any agreement with Bivio Networks is required to be filed pursuant to Item 601(b)(10)(ii)(B) of Regulation S-K.

We depend on resellers and distributors for our sales..., page 19

18. Please confirm whether any reseller or distributor, including any OEM, contributes to greater than 10 percent of your revenue. We note your disclosure on page 59 that no customer accounted for over 10 percent of your revenue.

Use of Proceeds, page 25

19. Please discuss in greater detail your planned use of proceeds for “financing [y]our growth, developing new products and funding capital expenditures.” Please discuss how the proceeds are to be used primarily in financing growth or to develop new products and address what capital expenditures you expect to fund with your proceeds from the offering. We note your disclosure on page 60, for example, stating that you intend to expand your direct sales force for international markets.
20. We note that you may use some of the proceeds from the offering to repay your credit facility. Please disclose the amount of proceeds that may be used for such purpose and provide any required disclosure for the indebtedness. See Instruction 4 to Item 504 of Regulation S-K.

Management’s Discussion and Analysis of Financial Condition and Results of Operations

Overview, page 32

21. Please discuss in greater detail the terminated merger transaction with Check Point in 2006. Please discuss the reasons for terminating the transaction and any ramifications the plan to merge and then the termination of such merger plans had on your business and subsequent plans for this offering.
22. Please elaborate on the possible effects on your business and results of operations of the PredatorWatch litigation. This litigation appears to constitute a currently known uncertainty that may reasonably be expected to have material effects upon you. Please quantify the expected effects of this and other known, material trends, events and uncertainties on your future results to the extent possible. Please see Item 304(a)(3)(ii) of Regulation S-K and Section III.B.3 of Release No. 33-8350 for additional guidance.
23. Please advise whether any specific product represents a significant and disproportionate share of your revenue. If so, please disclose here or elsewhere, as appropriate, your reliance on such product, the share of revenue attributed to such product and the risks that may be posed by your reliance on revenue from such product.

Critical Accounting Policies and Estimates

Accounting for Stock-based Compensation, page 36

24. You refer to the use of an independent valuation specialist to determine the fair market value of your securities as of April and August 2006. When a reference to an independent appraisal or valuation is included in a registration statement, you should also disclose the name of the expert and include the expert's consent with the filing. Refer to Rule 436(b) under the Securities Act. Alternatively, you may remove this reference.

Results of Operations, page 38

25. We note that your network security solutions include three products: RNA, Intrusion Sensors and the Defense Center. Your disclosure on page 4 indicates that your RNA products generate higher margins. We also note your disclosure on page 40 where you have quantified a certain level of revenues recognized by a certain class of intrusion sensors which were introduced during fiscal 2005. Your current disclosure only addresses total product changes recognized and the changes recognized when comparing reporting periods. Tell us what consideration you have given to discussing and disclosing the level of revenues recognized on each of your three products during each of the respective reporting periods presented.
26. We note you quantified the increase in professional and training services revenue recognized in fiscal 2005 in comparison to fiscal 2004. Tell us what consideration you have given to specifically quantifying and discussing, for each period presented, the relative changes therein as it relates to the level of both the support revenues and professional and training revenues recognized.

Comparison of Nine Months Ended September 30, 2006..., page 39

27. You disclose in your revenue discussion that you "did not introduce any new products in the 2006 period." Please reconcile this statement with your disclosure in your research and development discussion that you "release[d] new RNA, intrusion sensor and defense center products between October 2005 and May 2006.
28. It appears that you have omitted the actual percentage of total revenues that research and development expense constituted during the nine-month period ended September 30, 2006.

29. Your disclosure of the factors that contributed to your increased general and administrative expenses appears to exceed the amount that such expenses did increase between the two periods. Please disclose the offsetting factor that also affected your general and administrative expenses.

Liquidity and Capital Resources, page 44

30. We note your disclosure on page 46 that your working capital line of credit expires on March 28, 2007. Please disclose any plans with respect to this line of credit in light of its impending expiration.
31. Please disclose the quarterly tangible net worth thresholds you are required to maintain under your credit facility.

Business

Products, page 54

32. We note your disclosure that “the Defense Center can support up to 120 RNA Sensors and/or Intrusion Sensors.” Please expand to provide a sense of the size and scale of the network that is serviceable by 120 sensors. Please discuss whether multiple Defense Centers may be deployed, if necessary.
33. Please elaborate on the reasons for the range of prices for your sensors. Please consider whether separate disclosure of prices for your intrusion sensor, RNA sensor and Defense Center would be useful.
34. Please clarify whether use of your intrusion sensors also requires that a Defense Center be employed.

Sales and Marketing, page 60

35. Please disclose when you executed an OEM agreement with Nokia. Please clarify your relationship with and any material dependence on Nokia.

Research and Development, page 61

36. Please disclose the number of employees in your Vulnerability Research Team and explain to us the basis for your belief that you “have access to one of the largest and most sophisticated groups of IT security experts researching vulnerability and threats on a real-time basis.” Please tell us whether other security authorities coordinate with the open source community.

Manufacturing and Suppliers, page 61

37. Your disclosure indicates that you rely on a specific manufacturer for the production of a different product. Please disclose whether each manufacturer is responsible for a product that contributes significantly to your business. If so, it appears that the agreement with such manufacturer should be filed pursuant to Item 601(b)(10)(ii)(B) of Regulation S-K. Please file or otherwise advise.

Management

Board of Directors, page 68

38. Please elaborate on your plans with respect to the two new board members.

Option Grants in 2005, page 70

39. We note that you have no existing trading market for your shares. With respect to calculating your potential realizable values, please see Instruction 7 to Item 402(c) of Regulation S-K. Please also see Release No. 33-7009 and Interpretations J.16 and 17 of our July 1997 Manual of Publicly Available Telephone Interpretations. Please either use the midpoint of your offering price range until your initial public offering price is determined or discuss in a footnote the valuation method and assumptions used in determining the fair market value of the options. We note that you intend to use the midpoint of your offering price range with respect to your option values table.

Employment Agreements, page 70

40. Please elaborate on how the bonuses to your executive officers are determined including a specific discussion of any metrics or performance goals used.

Principal and Selling Stockholders, page 77

41. Please disclose the individual or individuals who exercise the voting and/or dispositive powers with respect to the securities to be offered for resale by your selling stockholders that are entities. Please see Interpretation I.60 of our July 1997 Manual of Publicly Available Telephone Interpretations and Interpretation 4S of the Regulation S-K portion of the March 1999 Supplement to our July 1997 Manual of Publicly Available Telephone Interpretations.
42. Please disclose whether any selling stockholder is an affiliate of a registered broker-dealer. If a selling stockholder is an affiliate of a registered broker-dealer, please expand the prospectus to indicate whether such selling stockholder acquired the securities to be resold in the ordinary course of business. Also indicate whether at the time of the

acquisition such selling stockholder had any agreements, understandings or arrangements with any other persons, either directly or indirectly, to dispose of the securities.

Description of Capital Stock, pages 79

43. We note that all shares of preferred stock will be converted into shares of common stock prior to the completion of the offering. We note that each share of the Series A preferred stock will convert into three shares of common stock while each share of the Series B, C and D preferred stock will convert into one share of common stock. Explain to us the reasons for the differences in the conversion ratios. Further, address any differences between the initial issuance price of the more recent issuances of preferred stock and the offering range of the common stock. Tell us whether there is any beneficial conversion feature associated with the conversion of the preferred stock.

Underwriters, page 85

44. Please elaborate on how the over-allotment option will be apportioned among your selling stockholders.

Consolidated Financial Statements

Consolidated Statements of Operations, page F-5

45. Please clarify for us that your statements of operations cost of revenue line item includes charges for depreciation and amortization. Your disclosure on page 34 under the caption, "Cost of Revenue" indicates that depreciation and amortization are included in cost of revenue. If such items are excluded from cost of revenue pursuant to SAB Topic 11:B the description of the cost of revenue line item should read somewhat as follows: "Cost of revenue (exclusive of items shown separately below)" or "Cost of revenue (exclusive of depreciation shown separately below)." Also, in view of your gross profit line, depreciation and amortization should not be positioned in the income statement in a manner that results in reporting a figure for income before depreciation and amortization. Please revise to conform your presentation to comply with SAB Topic 11:B.

Statements of Cash Flows, page F-8

46. We note the sale of "held to maturity" investments during the fiscal 2004 and 2005 periods and the interim period of fiscal 2006. Investments in debt securities shall be classified as held to maturity and measured at amortized cost only if there is a positive intent and ability to hold these securities to maturity. A debt security should not be classified as held to maturity if the company anticipates that the security would be available to be sold under certain conditions. The company has consistently sold these

types of investments. Thus, your activities would raise the question as to the appropriateness of your classification of these investments as “held to maturity” as opposed to classifying them as “available for sale.” Please address the criteria within paragraphs 9-11 of SFAS 115 in your response.

Notes to the Consolidated Financial Statements

Note 2. Summary of Significant Accounting Policies

47. Tell us and disclose the company’s accounting policy for commission expenses since we note that you utilize a direct sales force.

Revenue Recognition, page F-10

48. We note that the majority of your transactions include multiple elements. Describe further to us and disclose, as applicable, each of the elements included in your multiple-element arrangements and how you have established VSOE of fair value for each element. In your multiple-element arrangements where you have two or more undelivered elements and you recognize revenue under the residual method of paragraph 12 of SOP 97-2, explain to us your policy for the timing of revenue recognition for each of these undelivered elements.
49. You indicate that non-product revenues currently represent less than 10 percent of total “product revenues.” Explain to us further what you consider to be “non-product revenues” and provide us with the nature and dollar amount of each of these types of revenues recognized during the fiscal and interim periods presented.
50. We note that customers are charged for annual maintenance and support, which includes the right to receive the VRT-certified Rules and updates to the vulnerability database. The updates are critical to the successful performance of your security solution. Given that the upgrades are critical to performance, it would appear that these specified upgrade rights should be accounted for as separate elements and therefore allocated as a portion of the fee based on the VSOE of the upgrade. It appears that you make these upgrades available without charging a fee and are included as part of PCS. Further explain your accounting for these “subscriptions” and tell us what consideration you have given to accounting for these upgrades or subscriptions as a separate element in accordance with paragraphs 35-38 of SOP 97-2 or under the subscription accounting model of paragraphs 48-49 of SOP 97-2.
51. In arrangements where you provide professional services, tell us whether these types of arrangements require significant production, modification or customization of the software or whether these services are essential to the functionality of the other elements

in your arrangements. Explain how your accounting for services complies with paragraphs 63-71 of SOP 97-2.

52. Tell us how you determine what constitutes your normal customary payment term. Provide an analysis that supports your conclusion. Indicate if your payment terms vary by customer type, arrangement size and product mix. If so, tell us how you evaluated those factors in determining your normal customary payment terms. Disclose the typical payment terms of your arrangements, the amount of any down payment, any refund provisions or whether any payments are subject to specific milestones or customer acceptance provisions.
53. Tell us how you recognize revenue on contracts that involve extended payment terms. Note that extended payment terms may include periods less than one year, particularly if the use of the extended payment terms is not your customary practice. Refer to paragraphs 27 through 30 of SOP 97-2 to support your accounting.
54. Disclose your accounting for PCS and how it complies with paragraphs 56-62 of SOP 97-2. We note that these services are provided over a 12- to 36-month period.
55. Tell us and disclose whether you include any contingencies such as rights of return, conditions of acceptance, warranties or price protection in your arrangements. Identify the conditions of acceptance that may be uncertain and preclude revenue recognition.
56. We note you offer discounting based on transaction size, volume, federal or state programs, reseller or distributor involvement and level of technical support. See page 33. Please describe the terms associated with these discounts and explain their impact on determination of VSOE of fair value for your software arrangements.
57. Disclose how you recognize revenue for products that are sold through indirect channels. Tell us how your accounting complies with SFAS 48 if you offer a right of return.
58. We note that a significant amount of your revenue is derived from government contracts. Tell us whether your contracts with government agencies involve fiscal funding arrangements. If so, tell us how your accounting complies with paragraphs 32-33 of SOP 97-2.

Reclassification, page F-14

59. Please explain the nature and amounts of the reclassifications included in the financial statements for the fiscal periods 2003 and 2004 in the registration statement. Explain why you believe these are reclassifications.

Note 5. Debt and Warrants, page F-17

60. Please confirm that you have provided all of the disclosure required by Rule 5.02.19(b) of Regulation S-X such as the terms of your unused lines of credit and the weighted average interest rate on short term borrowings outstanding as of the date of each balance sheet presented.

Note 6. Convertible Preferred Stock, page F-18

61. We note the disclosure regarding the contingencies relating to the conversion of the different series of preferred stock into common stock dependent upon the to be determined public offering price and the attainment of a minimum level of gross proceeds to the company. Address whether conversion is probable based on the expected terms of your initial public offering.

Note 8. Stock Incentive Plan, page F-20

62. Please provide us with the following information in chronological order for stock option grants and other equity related transactions for the one year period preceding the most recent balance sheet date included in the filing and through the date of your response:
- The nature and type of stock option or other equity related transaction;
 - The date of grant/issuance;
 - Description/name of option or equity holder;
 - The reason for the grant or equity related issuance;
 - The number of options or equity instruments granted or issued;
 - The exercise price or conversion price;
 - The fair value of underlying shares of common stock;
 - The total amount of deferred compensation or value assigned to beneficial conversion feature reconciled to your financial statement disclosures; and
 - The amount and timing of expense recognition.
63. Continue to provide us with updates to the requested information for all equity-related transactions subsequent to this request through the effective date of the registration statement.

64. We note your disclosure that prior to April 2006, management and the board of directors determined the fair value of the common stock when granting stock options. You indicate that you used a contemporaneous preferred stock transaction approach that applied discounts for valuation differences due to: conversion privileges, dividends, control and seniority and liquidation preferences. You also indicate that financial performance and achievement of milestones were considered as well. Please tell us what objective evidence supports your determination of the fair value of the underlying shares of common stock at each grant or issue date. This objective evidence could be based on valuation reports that rely on methodologies discussed in the Practice Aid or on current cash sales of the same or a similar company security to a willing unrelated party other than under terms and conditions arising from a previous transaction.
65. Reconcile and explain the differences between the fair values of the underlying common stock at each valuation date, including the difference between the most recent fair value and the midpoint of your offering range. This reconciliation should describe significant intervening events within the company and changes in assumptions as well as weighting and selection of valuation methodologies employed that explain the changes in the fair value of your common stock up to the filing of the registration statement.
66. Tell us what consideration you gave to the Practice Aid's disclosure guidance in paragraph 179. As applicable, consider revising to include the following disclosures for options granted during the 12 months prior to the date of the most recent balance sheet included in the filing:
- For each grant date, the number of options or shares granted, the exercise price, the fair value of the common stock, and the intrinsic value, if any, per option (the number of options may be aggregated by month or quarter and the information presented as weighted-average per share amounts);
 - Whether the valuation used to determine the fair value of the equity instruments was contemporaneous or retrospective; and
 - Whether the valuation was performed by a related party.

Note 11. Business and Geographic Segment Information, page F-22

67. Tell us what consideration you have given to providing the disclosures required by paragraph 37 of SFAS 131 for your identified products.

Item 15. Recent Sales of Unregistered Securities

68. We note your disclosure on page 75 regarding the grant of a stock option to Vispi Daver. Please confirm whether such grant has been included in your disclosure regarding other option grants.
69. With respect to sales in which you relied on Section 4(2) of the Securities Act, please disclose the factual basis upon which you made such reliance. Please specifically state whether the purchasers were sophisticated with access to information or accredited.

* * * *

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 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 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 the 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.

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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 your registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act and the Exchange Act 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 Rules 460 and 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.

You may contact Marc Thomas at (202) 551-3452 or Craig Wilson, Senior Associate Chief Accountant, at (202) 551-3226 if you have questions regarding comments on the financial statements and related matters. Please contact Daniel Lee at (202) 551-3477 with any other questions. If you need further assistance, you may me at (202) 551-3730.

Sincerely,

Barbara C. Jacobs
Assistant Director

cc: Via Facsimile
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