

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8**REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933****Sonus Networks, Inc.**

(Exact Name of Registrant as Specified in Its Charter)

Delaware(State or Other Jurisdiction of Incorporation or
Organization)250 Apollo Drive, Chelmsford, Massachusetts
(Address of Principal Executive Offices)**04-3387074**(I.R.S. Employer
Identification No.)**01824**

(Zip Code)

Amended and Restated 1997 Stock Incentive Plan
(Full Title of the Plan)**Hassan M. Ahmed**
Chairman of the Board
and Chief Executive Officer
Sonus Networks, Inc.**250 Apollo Drive**
Chelmsford, Massachusetts 01824
(Name and Address of Agent For Service)**(978) 614-8100**

(Telephone Number, Including Area Code, of Agent For Service)

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.001 par value per share, to be issued under the Amended and Restated 1997 Stock Incentive Plan	40,000,000 shares	\$ 3.46(2)	\$ 138,400,000(2)	\$ 16,290

- (1) In accordance with Rule 416 under the Securities Act of 1933, as amended, this Registration Statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act of 1933, as amended, and based upon the average of the high and low prices of the Registrant's Common Stock as reported on the NASDAQ National Market on May 4, 2005.

EXPLANATORY NOTE

On August 9, 2000, we filed a Registration Statement on Form S-8 (file No. 333-43334) (the "First Registration Statement") that registered under the Securities Act of 1933, as amended (the "Securities Act"), an aggregate of 12,388,152 shares of common stock, par value \$0.001 per share (the "Common Stock"), issuable by us under our Amended and Restated 1997 Stock Incentive Plan (the "1997 Plan"). On February 2, 2001, we filed a subsequent Registration Statement on Form S-8 (file No. 333-54932) (the "Second Registration Statement") that registered an additional 10,862,349 shares of Common Stock issuable by us under the 1997 Plan. On May 14, 2003, we filed a third Registration Statement on Form S-8 (file No. 333-105215) (the "Third Registration Statement") that registered an additional 30,000,000 shares of Common Stock issuable by us under the 1997 Plan.

This Registration Statement on Form S-8 has been prepared and filed pursuant to and in accordance with the requirements of General Instruction E to Form S-8 for the purpose of effecting the registration under the Securities Act of an additional 40,000,000 shares of Common Stock issuable upon the exercise of stock options granted, or to be granted, under the 1997 Plan. Pursuant to General Instruction E to Form S-8, we hereby incorporate herein by reference the contents of the First Registration Statement, the Second Registration Statement and the Third Registration Statement.

Item 3. Incorporation of Documents by Reference.

We are subject to the informational and reporting requirements of Sections 13(a), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith file reports, proxy statements and other information with the Securities and Exchange Commission (the "Commission"). The following documents, which are on file with the Commission, are incorporated in this Registration Statement by reference:

DOCUMENTS	PERIOD
The description of our Common Stock, \$0.001 par value per share, contained in our Registration Statement on Form 8-A pursuant to Section 12(g) of the Exchange Act	Filed April 5, 2000
Annual Report on Form 10-K	Year ended December 31, 2004
Current Report on Form 8-K	Filed January 12, 2005
Amendment No. 1 to Annual Report on Form 10-K/A	Filed April 29, 2005
Quarterly Report on Form 10-Q	Filed May 9, 2005

All documents subsequently filed pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of the filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement.

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Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 5. Interests Of Named Experts And Counsel.

Wilmer Cutler Pickering Hale and Dorr LLP has opined as to the legality of the securities being offered by this registration statement. Attorneys at Wilmer Cutler Pickering Hale and Dorr LLP, directly or indirectly, own, in the aggregate, 190,825 shares of the Registrant's common stock.

Item 8. Exhibits.

The following exhibits are filed as part of this Registration Statement:

Exhibit Number	Description
4.1	Fourth Amended and Restated Certificate of Incorporation of the Registrant, as amended, is incorporated by reference to Exhibit No. 3.1 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2003 (file No. 000-30229)
4.2	Amended and Restated By-Laws of the Registrant are incorporated by reference to Exhibit No. 3.2 to the Registrant's Registration Statement on Form S-1 (file No. 333-32206)
5	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP, counsel to the Registrant
23.1	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5)
23.2	Consent of Ernst & Young LLP
24	Power of Attorney (included on the signature pages of this Registration Statement)

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Chelmsford, Massachusetts, on this 10th day of May, 2005.

SONUS NETWORKS, INC.

By: /s/ Hassan M. Ahmed
Hassan M. Ahmed
Chairman of the Board and Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Sonus Networks, Inc., hereby severally constitute and appoint Hassan M. Ahmed, Ellen B. Richstone and Charles J. Gray, and each of them singly, our true and lawful attorneys with full power to them, and each of them singly, to sign for us and in our names in the capacities indicated below, the registration statement on Form S-8 filed herewith and any and all subsequent amendments to said registration statement, and generally to do all such things in our names and on our behalf in our capacities as officers and directors to enable Sonus Networks, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Hassan M. Ahmed</u> Hassan M. Ahmed	Chairman of the Board of Directors and Chief Executive Officer (Principal Executive Officer)	May 10, 2005
<u>/s/ Ellen B. Richstone</u> Ellen B. Richstone	Chief Financial Officer (Principal Financial Officer)	May 10, 2005
<u>/s/ Bradley T. Miller</u> Bradley T. Miller	Vice President of Finance, Corporate Controller and Chief Accounting Officer (Principal Accounting Officer)	May 10, 2005
<u>/s/ Albert A. Notini</u> Albert A. Notini	President, Chief Operating Officer and Director	May 10, 2005
<u>/s/ Edward T. Anderson</u> Edward T. Anderson	Director	May 10, 2005
<u>/s/ John P. Cunningham</u> John P. Cunningham	Director	May 10, 2005
<u>/s/ Paul J. Ferri</u> Paul J. Ferri	Director	May 10, 2005

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<u>/s/ Rubin Gruber</u> Rubin Gruber	Director	May 10, 2005
<u>/s/ Paul J. Severino</u> Paul J. Severino	Director	May 10, 2005
<u>/s/ H. Brian Thompson</u> H. Brian Thompson	Director	May 10, 2005

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INDEX TO EXHIBITS

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WILMER CUTLER PICKERING
HALE AND DORR LLP60 STATE STREET
BOSTON, MA 02109
+1 617 526 6000
+1 617 526 5000 fax
wilmerhale.com

May 10, 2005

Sonus Networks, Inc.
250 Apollo Drive
Chelmsford, Massachusetts 01824Re: Amended and Restated 1997 Stock Incentive Plan

Ladies and Gentlemen:

We have assisted in the preparation of a Registration Statement on Form S-8 (the "Registration Statement") to be filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to 40,000,000 shares of common stock, \$0.001 par value per share (the "Shares"), of Sonus Networks, Inc., a Delaware corporation (the "Company"), issuable under the Company's Amended and Restated 1997 Stock Incentive Plan (the "Plan").

We have examined the Certificate of Incorporation and By-Laws of the Company, each as amended and restated to date, and originals, or copies certified to our satisfaction, of all pertinent records of the meetings of the directors and stockholders of the Company, the Registration Statement and such other documents relating to the Company as we have deemed material for the purposes of this opinion.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as copies, the authenticity of the originals of any such documents and the legal competence of all signatories to such documents.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares in accordance with the Plan, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

We express no opinion herein as to the laws of any state or jurisdiction other than the state laws of The Commonwealth of Massachusetts, the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when the Shares are issued and paid for in accordance with the terms and conditions of the Plan, the Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion with the Commission in connection with the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

WILMER CUTLER PICKERING
HALE AND DORR LLPBy: /s/ James R. Burke
James R. Burke, Partner

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement on Form S-8 pertaining to the Amended and Restated 1997 Stock Incentive Plan of Sonus Networks, Inc. of our reports dated March 14, 2005, with respect to the consolidated financial statements of Sonus Networks, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2004, Sonus Networks, Inc. management's assessment of the effectiveness of internal control over financial reporting, and the effectiveness of internal control over financial reporting of Sonus Networks, Inc., filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston Massachusetts
May 5, 2005
