

**UNITED STATES OF AMERICA
BEFORE FEDERAL TRADE COMMISSION**

COMMISSIONERS: **William E. Kovacic, Chairman**
 Pamela Jones Harbour
 Jon Leibowitz
 J. Thomas Rosch

In the Matter of
NEGOTIATED DATA SOLUTIONS LLC,
a limited liability company.

Docket No. C-4234

COMPLAINT

Pursuant to the provisions of the Federal Trade Commission Act, as amended, 15 U.S.C. § 41 et seq., and by virtue of the authority vested in it by said Act, the Federal Trade Commission (“Commission”), having reason to believe that Negotiated Data Solutions LLC (hereinafter referred to as “Respondent”) has violated Section 5 of the Federal Trade Commission Act, 15 U.S.C. § 45, and it appearing to the Commission that a proceeding by it in respect thereof would be in the public interest, hereby issues this Complaint stating its charges as follows:

NATURE OF THE CASE

1. Through this action, the Commission challenges a course of conduct whereby Respondent, and its predecessor in interest, Vertical Networks, Inc. (“Vertical”), engaged in unfair acts or practices and unfair methods of competition through which it sought to break a licensing commitment that its predecessor, National Semiconductor (“National”), made to the Institute of Electrical and Electronics Engineers (“IEEE”), a standard setting organization, in 1994. The relevant standard, which included the technology subject to the licensing commitment, was subsequently adopted by the industry.
2. The conduct at issue in this action has caused or threatened to cause substantial harm to competition and to consumers, and will in the future cause or threaten to cause further substantial injury to competition and to consumers, absent the issuance of appropriate relief in the manner set forth below.

RESPONDENT

3. Respondent is a limited liability company organized, existing, and doing business under and by virtue of the laws of the State of Illinois, with its office and principal place of business located at 1550 N. Lake Shore Drive, No. L6C, Chicago, Illinois 60610.
4. Respondent is engaged in the business of licensing patents that it has acquired. Respondent does not produce or manufacture tangible products.
5. Respondent is, and at all relevant times has been, a person, partnership, or corporation within the meaning of Section 5 of the Federal Trade Commission Act, 15 U.S.C. § 45, and at all times relevant herein, Respondent has been, and is now, engaged in commerce as "commerce" is defined in Section 4 of the Federal Trade Commission Act, 15 U.S.C. § 44.

THE DEVELOPMENT OF THE FAST ETHERNET STANDARD

6. In or about 1983, the IEEE published the first 802.3 standard, the Ethernet standard, which allowed computer equipment attached to a local area network ("LAN") to transmit data across a copper wire at a rate of 10 megabits per second ("Mbps"). Computer equipment manufacturers subsequently adopted the Ethernet standard which ensured that their equipment would be interoperable.
7. In or about 1993, the IEEE authorized the 802.3 Working Group to develop a new standard based on the Ethernet standard to meet the demand for higher data transmission rates. Employees of National were members of and active participants in the 802.3 Working Group.
8. The new standard, commonly referred to as "Fast Ethernet," would allow equipment attached to a LAN to transmit data across a copper wire at 100 Mbps.
9. The 802.3 Working Group wanted Fast Ethernet equipment to be compatible, to the extent possible, with then-existing LANs based on the original Ethernet standard, which operated at substantially slower data transmission rates. The terms "autodetection" and "autonegotiation" were used to refer to technology that would permit such compatibility by enabling two devices at opposing ends of a network link to exchange information and automatically configure themselves to optimize their communication.
10. In 1994, National proposed that the 802.3 Working Group incorporate an autonegotiation technology developed by National, and referred to as "NWay," into the Fast Ethernet standard. National had filed a patent application for that technology, Ser. No. 07/971,018, in 1992.

11. The 802.3 Working Group considered several alternative technologies to National's "NWay" technology prior to the adoption of the Fast Ethernet standard. It also considered adopting a Fast Ethernet standard without an autonegotiation feature.
12. At IEEE meetings to determine which autodetection technology to include in the 802.3 standard, one or more representatives of National publicly announced that if NWay technology were chosen, National would license NWay to any requesting party for a one-time fee of one thousand dollars (\$1,000). National made that assurance fully knowing that, as a result, it could be forgoing significant licensing revenues.
13. In a subsequent letter dated June 7, 1994, and addressed to the Chair of the 802.3 Working Group of IEEE, National wrote:

National Semiconductor Corporation ("National") is pleased to be a contributing member of the IEEE 802.3 Working Group responsible for developing an autodetection standard based upon National's architecture informally known as "NWay." To further demonstrate its support for this effort, National would like to make clear its position with respect to prospective licensing of National's intellectual property rights in its NWay technology.

In the event that the IEEE adopts an autodetection standard based upon National's NWay technology, National will offer to license its NWay technology to any requesting party for the purpose of making and selling products which implement the IEEE standard. Such a license will be made available on a nondiscriminatory basis and will be paid-up and royalty-free after payment of a one-time fee of one thousand dollars (\$1,000.00).

14. The IEEE adopted a Fast Ethernet standard with an autodetection feature based upon the NWay technology after National made its licensing commitment. National's one thousand dollar licensing commitment was a significant factor contributing to the incorporation of NWay technology into the 802.3 standard. For example, various IEEE members were aware of and relied upon National's one thousand dollar licensing commitment when they voted to include NWay as the autodetection technology in the 802.3 standard.
15. National benefited financially from its licensing assurance. The assurance accelerated sales of National products that conformed to the Fast Ethernet standard by (a) speeding completion of the standard by allaying concerns about the future costs of autonegotiation, and (b) increasing the demand for Fast Ethernet products by making them backward compatible with Ethernet equipment already installed on existing LANs.

INDUSTRY ADOPTION OF THE FAST ETHERNET STANDARD

16. IEEE published the Fast Ethernet standard with National's NWay autonegotiation technology in 1995. By that time, Ethernet was the dominant standard for wired LANs and there were millions of Ethernet ports installed in the United States.
17. Inclusion of autonegotiation technology in the Fast Ethernet standard enabled owners of existing Ethernet-based LANs to purchase and install multi-speed, Fast Ethernet-capable equipment on a piecemeal basis without having to upgrade the entire LAN at once or buy extra bridging equipment.
18. Since 1995, dozens of manufacturers, including many of whom did not participate in the standard setting process, incorporated the Fast Ethernet standard with the NWay technology into hundreds of millions of computer devices such as personal computers, switches, routers, DSL and cable modems, wireless LAN access points, IP phones, and other equipment. Several of these firms were aware of National's commitment to license NWay technology for a one-time fee of one thousand dollars. Standardizing on a single autonegotiation technology allowed Fast Ethernet devices made by different manufacturers to work with one another and with legacy Ethernet equipment.
19. By 2001, there were no commercially viable alternative autonegotiation technologies for Ethernet. The inclusion of NWay in the Fast Ethernet standard and the subsequent adoption of that standard by the industry eliminated viable autonegotiation technology alternatives from the marketplace.
20. The Fast Ethernet standard with the NWay technology became the industry standard after its publication. The standard and the technology have been integrated into hundreds of millions of computer devices and equipment. NWay is the only autonegotiation technology that works with this installed base of wired Ethernet and Fast Ethernet equipment. As a result the industry has been locked into using NWay technology since at least 2001.
21. The inclusion of NWay technology into the Fast Ethernet standard and the subsequent adoption of that standard by the industry conferred monopoly power which otherwise would not have existed.

ASSIGNMENT OF THE PATENTS TO VERTICAL NETWORKS

22. National was issued U.S. Patent No. 5,617,418 ("the '418 Patent") on April 1, 1997, and U.S. Patent No. 5,687,174 ("the '174 Patent") on November 11, 1997. Both patents arose from a common parent application, Ser. No. 07/971,018, which National had filed on November 2, 1992. National later received equivalent counterpart patents issued by certain foreign governments. Hereinafter, the '174, the '418, and the equivalent counterpart foreign patents are

collectively referred to as “the Patents.” The ’174 and ’418 Patents expire in 2014.

23. On or about June 30, 1998, National assigned to Vertical all rights, titles and interests in nine U.S. patents and their foreign counterparts. The Patents were included in that assignment.
24. Prior to the assignment of the Patents, National gave Vertical a copy of the June 7, 1994 letter. Vertical acknowledged at the time that it had been informed “that several of the patents may be ‘encumbered’ by whatever actions [National] may have taken in the past with respect to the IEEE standards.” The final agreement between Vertical and National stated that the assignment is “subject to any existing licenses and other encumbrances that [National] may have granted.” It further provided, “Existing licenses shall include. . . [p]atents that may be encumbered under standards such as an IEEE standard.”

BREACH OF THE LICENSING COMMITMENT

25. Vertical was struggling financially by late 2001 in the wake of the “dot com” bust and the shakeout of the telecommunications industry. Vertical sought to generate new revenue streams by licensing its patents and enforcing its rights against third parties it believed might infringe those patents.
26. In Spring 2002, Vertical also sought to alter the terms of National’s licensing commitment to the IEEE in an effort to increase the prices it could charge those companies that implemented the Fast Ethernet standard and NWay.
27. In a March 27, 2002 letter to the IEEE, Vertical asserted that one or more of the Patents “may be applicable to portions and/or amendments of” IEEE standard 802.3. In that same letter, Vertical promised to make available to any party a non-exclusive license under the Patents “on a non-discriminatory basis and on reasonable terms and conditions including its then current royalty rates.” The March 27, 2002 letter referred to the June 7, 1994 letter, although it did not describe the terms of that letter. In particular, Vertical did not mention that National had committed to license NWay for a one-time fee of one thousand dollars. The 2002 letter concluded by claiming that “the assurances provided in this letter supersede any assurances provided by National Semiconductor Corporation relevant to the above-identified patents.”
28. At or around the same time it sent the letter to the IEEE, Vertical identified approximately sixty-four “Target Companies.” Vertical subsequently sent letters to many of the “Target Companies” demanding licensing fees on a per unit basis for “802.3-compliant auto-negotiating products.” Those demands represent a substantial increase over National’s commitment to license the NWay technology for a one-time fee of one thousand dollars.

29. Vertical made a “conservative estimate” that the Patents cover at least seventy percent of Ethernet port shipments worldwide. Based on market data, Vertical projected that the Patents would generate more than \$20 million a year in licensing revenue.
30. Several companies sought to accept the original licensing offer and tendered \$1,000 in accordance with the June 7, 1994 letter. Vertical rejected those acceptances.
31. Vertical threatened or initiated legal actions against companies that refused to pay the royalties it demanded. As a result of that effort, several companies entered into licensing agreements that have produced licensing fees for the Patents far in excess of \$1,000 per company.
32. Companies are locked into using NWay given the installed base of Ethernet and Fast Ethernet computer equipment, the incompatibility of NWay with alternative autonegotiation technologies, and the significant costs associated with a decision to abandon autonegotiation altogether.
33. On or about November 14, 2003, Vertical assigned the Patents to Respondent. Subsequently, Vertical sold its remaining business assets and ceased operations.
34. Respondent possessed a copy of, and was familiar with the June 7, 1994 letter of assurance when it received assignment of the Patents from Vertical. A principal of Respondent had represented Vertical in the negotiations in 1998 that led to National’s agreement assigning the Patents to Vertical.
35. Respondent has asserted and continues to assert that making, using, selling, offering for sale, or importing things that employ NWay autonegotiation technology infringes the Patents.

HARM TO COMPETITION & CONSUMERS

36. The acts and practices of Respondent, as herein alleged, were and are to the prejudice and injury of consumers, are continuing and will continue in the absence of the relief herein requested. The injury to consumers of NWay technology include, but are not limited to, the following:
 - a. increased royalties (or other payments) associated with the manufacture, sale, use or importation of products that implement an IEEE standard enabling autonegotiation by or with 802.3 compliant products; and
 - b. increases in price and/or reductions in the use or output of products that implement an IEEE standard enabling autonegotiation by or with 802.3 compliant products.

37. The threatened or actual anticompetitive effects of Respondent's conduct include, but are not limited to, the following:
- a. increased royalties (or other payments) associated with the manufacture, sale, use or importation of products that implement an IEEE standard enabling autonegotiation by or with 802.3 compliant products;
 - b. increases in price and/or reductions in the use or output of products that implement an IEEE standard enabling autonegotiation by or with 802.3 compliant products;
 - c. decreased incentives on the part of semiconductor chip and LAN equipment manufacturers to produce products that implement IEEE standards enabling autonegotiation by or with 802.3 compliant products;
 - d. decreased incentives on the part of semiconductor chip and LAN equipment manufacturers and others to participate in IEEE or other standard setting activities; and
 - e. both within and outside the semiconductor chip and LAN equipment industries decreased reliance, or willingness to rely, on standards established by industry standard setting organizations.

VIOLATIONS ALLEGED

38. The acts and practices of Respondent, as described in Paragraphs 1-38 above, incorporated herein by reference, constitute unfair methods of competition in or affecting commerce in violation of Section 5 of the Federal Trade Commission Act, 15 U.S.C. § 45.

39. Respondent's course of conduct has caused and is likely to continue to cause substantial injury to consumers of NWay technology that could not reasonably be avoided and is not outweighed by countervailing benefits to consumers or competition. Therefore, Respondent's conduct, as described in paragraphs 1-37 above, incorporated herein by reference, constitute unfair acts or practices in or affecting commerce in violation of Section 5 of the Federal Trade Commission Act, 15 U.S.C. § 45.

WHEREFORE, THE PREMISES CONSIDERED, the Federal Trade Commission on this twenty-second day of September, 2008, issues its complaint against Respondent.

By the Commission, Chairman Kovacic dissenting.

Donald S. Clark
Secretary

SEAL: