New York State Department of Taxation and Finance Taxpayer Services Division Technical Services Bureau

TSB-A-88(4)S Sales Tax December 3, 1987

STATE OF NEW YORK COMMISSIONER OF TAXATION AND FINANCE

ADVISORY OPINION

PETITION NO. S861215A

On December 15, 1986 a Petition for Advisory Opinion was received from Protocom Devices Inc., 1666 Bathgate Avenue, Bronx, New York 10457.

The issue raised is whether equipment purchased for research and development by a producer of data communication hardware and software qualifies for exemption from sales tax under Section 1115(a)(10) of the Tax Law.

Since the inception of Protocom Devices in February, 1983, Petitioner has, by its own research and development efforts, created communication processors which function as the physical connective points between vendor-specific (i.e., IBM, Sperry, Burroughs, Honeywell) electronic data processing equipment and private and public X.25 packet switched networks (PSNs). X.25 is an international standard defining the operation of a PSN.

The packet assemblers/dissassemblers (PADs) Petitioner has developed handle data going into a PSN in a manner analogous to placing a letter in an envelope, addressing the letter and placing the letter in a mailbox. The network functions as the "post office", delivering the letter (data) to its destination. A receiving PAD checks the address, opens the envelope and delivers the letter (data) to its destination.

These hardware products contain the software programs Petitioner has developed and is continually improving by constructing test environments for performing procedures such as emulation of host and terminal processors, simulation of network conditions, software debugging, and data transmission, monitoring and analysis.

Equipment Petitioner has purchased for use in research and development includes PC based development stations; data analyzers/simulators/scopes; one Ironics 1600 Development System; various test/debug devices, terminals, printers and modems; one mainframe (with required software) for developing software protocols and maintaining research and development data.

Petitioner inquires whether the sales tax it has paid on the purchase of this equipment is refundable.

Section 1115(a)(10) of the Tax Law exempts tangible personal property used directly and predominantly in research and development in the experimental or laboratory sense.

Pursuant to the Sales and Use Tax Regulations this exemption does not extend to repair and installation services for such property. 20 NYCRR 518.11(a)(2).

Regulation Section 528.11 explains further:

- (b)...(1) Research and development, in the experimental or laboratory sense, means research which has as its ultimate goal
 - (i) basic research in a scientific or technical field of endeavor;
 - (ii) advancing the technology in a scientific or technical field of endeavor;
 - (iii) the development of new products;
 - (iv) the improvement of existing products;
 - (v) the development of new uses for existing products.
- (2) Research and development in the experimental or laboratory sense does not include
 - (i) testing or inspection of materials or products for quality control.
- (c)...(1) Direct use in research and development means actual use in the research and development operation. Tangible personal property for direct use would broadly include materials worked on and machinery equipment and supplies used to perform the actual research and development work. Usage in activities collateral to the actual research and development process is not deemed to be use directly in research and development.
- (2) Tangible personal property is used predominantly in research and development if over fifty percent of the time it is used directly in such function.
- (3) Tangible personal property is exempt only if it meets the tests of direct and predominant use.

Accordingly, when electronic data processing equipment is used to adapt or modify customer hardware or software, to test products intended for sale or merely to design or redesign a hardware configuration, it is not deemed to be used in research and development; but when a computer is employed to test models of a new product for quality and performance standards prior to manufacturing such new models, it is used directly in an experimental function, and if over 50% of the computer's use is attributable to such function it is used predominantly in research and development and will qualify for exemption from State and local (including New York City) sales tax in accordance with Tax Law § 1115(a)(10).

Additionally, Section 1115(b)(ii) of the Tax Law exempts from sales tax gas, electricity, refrigeration and steam used or consumed directly and exclusively in research and development in the experimental or laboratory sense.

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The Sales and Use Tax Regulations state that gas, electricity, refrigeration and steam is used exclusively in research and development if it serves 100 percent in such function. Because gas, electricity, refrigeration and steam is normally received by the user in bulk or in a continuous flow, a portion of which is usually consumed for nonexempt purposes, the user may claim a refund or credit for the tax paid on the portion used directly and exclusively in research operations. The refund request must be submitted with an engineering survey or documentation of the formula applied to arrive at the exempt utility purchases. 20 NYCRR 528.11(c)(4). A Department of Taxation and Finance Publication on Determining Electricity Used in the Production of Tangible Personal Property for Sale (TSB-M-82(25)S) contains information generally helpful for allocating electric power between taxable and exempt uses.

It should be noted that fuel, gas and electricity purchased for general heating, cooling and lighting of research buildings or areas do not qualify for exemption, as they are neither consumed directly nor exclusively in research and development operations.

Petitioner may request a refund or credit of taxes paid on purchases of tangible personal property, fuel and utilities eligible for exemption pursuant to the above quoted sections of the Tax Law and Regulations, by filing Form AU-11, <u>Application for Credit or Refund of State and Local Sales and Use Tax.</u>

DATED: December 3, 1987

s/FRANK J. PUCCIA

Director

Technical Services Bureau

NOTE: The opinions expressed in Advisory Opinions are limited to the facts set forth therein.