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

TSB-A-85(17)S Sales Tax June 12, 1985

STATE OF NEW YORK STATE TAX COMMISSION

ADVISORY OPINION

PETITION NO. S831201B

On December 1, 1983 a Petition for Advisory Opinion was received from Sybron Corporation, 1100 Midtown Tower, Rochester, New York 14604.

The issue raised is whether a Computer Aided Drafting (CAD) System purchased by the Petitioner's, Pfaudler Division, qualifies for sales tax exemption as tangible personal property for use or consumption directly and predominantly in research and development in the experimental or laboratory sense within the meaning and intent of Section 1115(a)(10) of the Tax Law.

Pfaudler is a manufacturer of glassed steel equipment and machinery and specialized process equipment and machinery. Petitioner states that 63% of all production is custom built and the remaining 37% is split between standard and modified standard products. Each custom built glassed steel system or processed equipment system is specifically designed, developed and produced for a customer's specific order. The sole function of the CAD System as used by the petitioner's engineering department is to develop and design custom built machinery.

Petitioner described the computer's use as follows:

The design engineer, through trial and error, develops a three dimensional graphic model on the CAD. The CAD performs scientific calculations in order to produce a three dimensional graphic model which can be examined on the CRT from numerous angles as a whole and from cutaway viewpoints. From this model, calculations are then made by the CAD to determine if the customer's precise equipment performance, function and reliability requirements can be met. If these requirements can be met it is then determined if the design is economically feasible for commercial production. If not, the product is redesigned on the CAD.

Section 1115(a)(10) of the Tax Law provides an exemption from the sales tax for tangible personal property purchased for use or consumption directly and predominantly in research and development in the laboratory sense. . . .

Regulation section 528.11(b)(1) of the Tax Law states that research and development in the experimental or laboratory sense means research which has 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.

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Paragraph (c) of this regulation defines direct use in research and development as actual use in the research and development operation. Tangible personal property for direct use would broadly include materials worked on, and machinery, equipment and supplied used to perform the actual research and development work . . . (2) Tangible personal property is used predominantly in research and development if over 50 percent of the time it is used directly in such function.

Example 4 contained in regulation section 528.11 provides:

An aircraft manufacturer assembles two airplanes, which it uses for function and reliability tests prior to manufacturing this type of airplane for sale. The parts, equipment, instrumentation and fuel used on the airplanes during the testing phase are exempt as they are used directly and predominantly in research and development.

The use of a computer merely to design or redesign a new product does not by itself qualify as research and development. However, petitioner's use of its computer to test for a new product's ability to meet function and reliability standards prior to manufacture is the same as the use of the airplanes in Example 4 above. Accordingly, the computer is used directly and predominantly in research and development if over 50% of the computer's use is attributable to such function and reliability tests. If such is the case, it will qualify for the exemption afforded by section 1115(a)(10) of the Tax Law.

DATED: May 14, 1985

FRANK J. PUCCIA

Director

Technical Services Bureau

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