In the Matter of the Petition

of

James P. Welsh

AFFIDAVIT OF MAILING

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for Redetermination of a Deficiency or a Revision of a Determination or a Refund of Unincorporated Business Tax under Article 23 of the Tax Law for the Years 1972,1973.

State of New York County of Albany

Jay Vredenburg, being duly sworn, deposes and says that he is an employee of the Department of Taxation and Finance, over 18 years of age, and that on the 12th day of December, 1980, he served the within notice of Decision by certified mail upon James P. Welsh, the petitioner in the within proceeding, by enclosing a true copy thereof in a securely sealed postpaid wrapper addressed as follows:

James P. Welsh 504 Brantwood Dr. Snyder, NY 14226

and by depositing same enclosed in a postpaid properly addressed wrapper in a (post office or official depository) under the exclusive care and custody of the United States Postal Service within the State of New York.

That deponent further says that the said addressee is the petitioner herein and that the address set forth on said wrapper is the last known address of the petitioner.

Sworn to before me this 12th day of December, 1980.

In the Matter of the Petition

of

James P. Welsh

AFFIDAVIT OF MAILING

for Redetermination of a Deficiency or a Revision : of a Determination or a Refund of Unincorporated Business Tax : under Article 23 of the Tax Law for the Years 1972,1973.

State of New York County of Albany

Jay Vredenburg, being duly sworn, deposes and says that he is an employee of the Department of Taxation and Finance, over 18 years of age, and that on the 12th day of December, 1980, he served the within notice of Decision by certified mail upon Joseph D. Brendle the representative of the petitioner in the within proceeding, by enclosing a true copy thereof in a securely sealed postpaid wrapper addressed as follows:

Mr. Joseph D. Brendle 64 Karan Dr. Tonawanda, NY

and by depositing same enclosed in a postpaid properly addressed wrapper in a (post office or official depository) under the exclusive care and custody of the United States Postal Service within the State of New York.

That deponent further says that the said addressee is the representative of the petitioner herein and that the address set forth on said wrapper is the last known address of the representative of the petitioner.

Sworn to before me this 12th day of December, 1980.

STATE OF NEW YORK STATE TAX COMMISSION ALBANY, NEW YORK 12227

December 12, 1980

James P. Welsh 504 Brantwood Dr. Snyder, NY 14226

Dear Mr. Welsh:

Please take notice of the Decision of the State Tax Commission enclosed herewith.

You have now exhausted your right of review at the administrative level. Pursuant to section(s) 722 of the Tax Law, any proceeding in court to review an adverse decision by the State Tax Commission can only be instituted under Article 78 of the Civil Practice Laws and Rules, and must be commenced in the Supreme Court of the State of New York, Albany County, within 4 months from the date of this notice.

Inquiries concerning the computation of tax due or refund allowed in accordance with this decision may be addressed to:

NYS Dept. Taxation and Finance Deputy Commissioner and Counsel Albany, New York 12227 Phone # (518) 457-6240

Very truly yours,

STATE TAX COMMISSION

cc: Petitioner's Representative
 Joseph D. Brendle
 64 Karan Dr.
 Tonawanda, NY
 Taxing Bureau's Representative

STATE TAX COMMISSION

In the Matter of the Petition

of

JAMES P. WELSH

DECISION

for Redetermination of a Deficiency or : for Refund of Unincorporated Business Tax under Article 23 of the Tax Law : for the Years 1972 and 1973.

Petitioner, James P. Welsh, 504 Brantwood Drive, Snyder, New York 14226, filed a petition for redetermination of a deficiency or for refund of unin-corporated business tax under Article 23 of the Tax Law for the years 1972 and 1973 (File No. 13999).

A small claims hearing was held before Carl P. Wright, Hearing Officer, at the offices of the State Tax Commission, Genesee Building, One W. Genesse Street, Buffalo, New York, on April 23, 1980 at 2:45 P.M. Petitioner, James P. Welsh, appeared with Joseph D. Brendle. The Audit Division appeared by Ralph J. Vecchio, Esq. (Patricia L. Brumbaugh, Esq., of counsel).

ISSUE:

Whether petitioner's activities as an electrical engineer constitute the practice of a profession exempt from unincorporated business tax.

FINDINGS OF FACT

1. Petitioner, James P. Welsh, and Althea E. Welsh, his wife, filed
New York State combined income tax returns for 1972 and 1973. Mr. Welsh
reported income received as a researcher and a consultant. Petitioner did not
file any unincorporated business tax returns for the years at issue.

- 2. On September 29, 1975, the Audit Division issued a Notice of Deficiency and explanatory Statement of Audit Changes against petitioner for 1972 and 1973, imposing unincorporated business tax of \$1,086.42 plus interest. The deficiency was issued on the grounds that the activities of petitioner constituted the carrying on of an unincorporated business subject to unincorporated business tax.
- 3. Petitioner, James P. Welsh, received a degree in electrical engineering from Carnegie Institute of Technology in 1938 and has taken graduate study at the University of Buffalo and Cornell University. He did not have a professional engineer's license since his work never required one.
- 4. Petitioner, James P. Welsh, authored the Air Force and Navy's Thermal Design Manuals and pioneered in the thermal management of electronics systems and the related aspects of reliability. Petitioner, James P. Welsh, has over 25 years of experience, as both project director and staff member, in research associated with military and aerospace electronics. He also has experience in communications, instrumentation, thermodynamics of electronics, acoustics, reliability, miniaturization, microelectronics, solid-state physics, system engineering and electron device technology. He has been responsible for research in the fields of cooling of electronic equipment, reliability (with emphasis on thermal reliability), missile telemetering and guidance techniques, communications systems, specialized antennas, instrumentation and transducers, solid-state and electron devices, thermodynamics, fire control systems, thermoelectric cooling, advanced IFF techniques, and precise time and frequency control.

Petitioner has over 25 years of experience in research in techniques for cooling electronic and electrical equipment. He was project director and principal investigator for seven continuing research programs for the development

of cooling techniques for shipboard electronic equipment sponsored by the U.S. Navy Bureau of Ships. Also, he has had seven years of similar responsibility for eight Air Force and IBM electronic equipment cooling programs. He has also been responsible for thermal studies of high-temperature (500 C) electronic equipment and components under Navy sponsorship, for studies concerned with the thermal aspects of 2000 F antennas, and for spacecraft cooling studies and microelectronic cooling investigations.

In 1967, petitioner was <u>elected a Fellow of the IEEE</u> with the following citation: <u>"For his contributions to thermal measurement and cooling of electronic equipment."</u>

Petitioner is listed in Who's Who in Science, Who's Who in World Aviation, and American Men of Science. He has authored 58 technical papers and publications. For 10 years, he was the alternate delegate to the Radio Technical Commission for Aeronautics.

Petitioner is the co-inventor of the basic patent on the Duel Heat Pipe with Electronic Control of Thermal Conductance - U.S. Patent No. 3,614,981, October 1971. He holds two (2) other patents which are assigned to the Department of Defense.

5. In 1971, petitioner, James P. Welsh, founded a "Think Tank" called Thermal Technology Laboratory (hereinafter TTL). At TTL, Mr. Welsh has been responsible for the technical direction and management of contracts for the development of lightweight high power transformers, for the development of lightweight very high power transformer/rectifier units and for thermal systems management and thermal reliability analysis for a classified high power ECM system.

TTL is staffed by a small group of senior research engineers and scientists who have had collectively over seventy years of specialized experience in thermal reliability, thermal systems management, and cooling of high power density electronics. Headed by petitioner, James P. Welsh, Fellow IFFE, who is a well known expert in these areas, TTL has been engaged in the research associated with the diagnosis and solution of thermal problems in military electronic systems and, based on the application of advanced thermal techniques, the development of very high power density low specific weight electromagnetic devices. The cooling methods for these devices range from efficiently designed free convection to exotic boiling liquid systems. Most of the design of these systems is done with the aid of specially developed interactive computer programs which permit consideration of all pertinent parameters for optimum system design.

Also, research associated with the thermal reliability of, packaging of, heat transfer in, and cooling of military electronic equipment. For example, TTL completed a contract for Study of Thermal Interface for Standard Electronic Modules for the NAFI, and investigated the packaging and thermal design of SHP Modules for NAVELEX. In addition, TTL prepared a comprehensive four (4) volume NAVY Thermal Design Handbook for engineers designing military electronic equipment. This 835 page document is the cumulation of over two decades of research in the thermal design of military electronic equipment, sponsored by the USAF and the Navy. The official title is "Reliability Handbook for Thermal Applications.

Under USAF Contracts, TTL conducted thermal analyses and reliability predictions for the AN/ALQ-99 ECM system, which was to be modified for installation in the EF-111A. As part of this program, TTL provided thermal management inputs and assisted in the establishment of the reliability goals and thermal

performance requirements for this new USAF system. Computer aided design programs were used extensively on this program.

Later, under another USAF Contract, TTL established the peak operating temperatures of critical component parts throughout this complex system (Navy version) by conducting operational flight and bench tests at a Navy facility. This established valid criteria, a data base, and updated goals for the thermal reliability of the USAF EF-111A system now under development.

In 1972 and 1973, TTL completed two Air Force sponsored programs for the development of lightweight high power transformers. TTL also completed the development of two high power transformer/rectifier units for the U.S. Army. Further, TTL was completing a study of the power conditioning for high power ECM systems of the 90's.

6. Petitioner's, James P. Welsh, activities in 1972 and 1973 was restricted to applied research and development. Petitioner's only customer is the U.S. Government (USAF, Navy, Army, NASA, etc.), and his output is new technical information. Petitioner does not manufacture any products in the usual sense. However, petitioner will fabricate experimental models and hardware to verify research results only. Over 80 percent of his gross income is derived from personal services.

CONCLUSIONS OF LAW

A. That 20 NYCRR 203.11(b)(1)(i) provides:

"[T]he term other profession includes any occupation or vocation in which a professed knowledge of some department of science or learning, gained by a prolonged course of specialized instruction and study, is used by its practical application to the affairs of others, either advising, guiding or teaching them..."

It is evident from petitioner's educational background and the nature of services which he rendered that his activities were of a professional nature.

- B. That the activities of petitioner, James P. Welsh, as electrical engineer during the years in issue, constituted the practice of a profession; therefore, said practice is not deemed to be an unincorporated business within the intent and meaning of section 703(c) of the Tax Law.
- C. That petitioner's services rendered to agencies of the Federal government were not services dealing with the conduct of business itself. As such, the income derived therefrom is exempt from the imposition of unincorporated business tax within the meaning and intent of section 703(c) of the Tax Law.

 (Matter of Petition of Lemont K. Richardson, State Tax Commission decision May 2, 1980.)

D. That the petition of James P. Welsh is granted and the Notice of Deficiency issued September 29, 1975 is hereby cancelled.

DATED: Albany, New York

DEC 1 2 1980

TATE TAX COMMISSION

RESIDENT

COMMISSIONER