

STATEMENT OF CONSIDERATIONS

REQUEST BY UNITED TECHNOLOGIES RESEARCH CENTER (UTRC) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS TO INVENTIONS MADE UNDER CONTRACT NO. DE-FC26-01NT41254 ENTITLED "DEVELOPMENT OF A HIGH LATENT EFFECTIVENESS ENERGY RECOVERY VENTILATOR WITH INTEGRATION INTO ROOFTOP PACKAGE EQUIPMENT"; W(A)-02-006, CH1090.

UTRC has requested an advance waiver of domestic and foreign patent rights on behalf of its parent company, United Technologies Corporation (UTC) to inventions its employees may conceive or first actually reduce to practice in the performance of Contract No. DE-FC26-01NT41254.

As brought out in the attached waiver petition, the scope of work includes developing and optimizing the design of an energy recovery ventilator air-to-air heat exchanger (ERV) that has enhanced latent energy transfer effectiveness. After optimizing the performance of the ERV, multiple units will be fabricated and installed in a demonstrator rooftop air conditioner. Control strategies will be developed and the performance of the enhanced ERV rooftop pair will be documented. System simulation codes will be developed and used to optimize the control system and mechanical design of the unit.

This Cooperative Agreement is cost shared, with UTC paying 30 percent of the cost share. The total approved budget is \$905,122, with the DOE share being \$633,574 and the UTC share \$271,548. The UTC share is in the form of cash to perform the program. The period of performance is for 3.25 years from October 01, 2001.

Referring to paragraph 8 of the waiver petition, in addition to its cash commitment to the program, UTC is currently renovating the laboratory which will perform the work under this cooperative agreement. UTC expects to commit substantial future resources to this program to ensure a successful product.

Referring to paragraphs 5 and 6 of the waiver petition, UTC is a multi-national corporation with recognized expertise and high quality products, including air conditioning components and systems by its subsidiary, Carrier. UTC has a strong position regarding patents and publications for the technologies being further developed in this program.

Referring to paragraph 10 of the waiver petition, UTC was late to enter the energy recovery ventilator market. Products currently sold under the Carrier name are purchased from other suppliers. The largest supplier is Venmar, a Canadian firm which purchases components from Japanese companies. Successful completion of the work under this agreement and granting of the waiver would help establish a domestic industry in high-latent transfer ERV products.

UTC has agreed to the terms of the usual advance patent waiver, including background patent rights, and background data licensing provisions. These advance patent waiver provisions include a Government license, march-in rights and preference for U.S. industry provisions comparable to those set out in 35 U.S.C. 202-204, as well as a U.S. Competitiveness Clause which requires that products embodying a waived invention or produced through this use of a waived invention be manufactured substantially in the United States unless the participant can show to the satisfaction of DOE that it is not commercially feasible to do so. In the event DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. UTC has also agreed to make the above conditions binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees. Additionally, should or other entity receiving rights in any waived invention undergo a change in ownership amounting to a controlling interest, the waiver, assignment, license or other transfer of rights in the waived invention is suspended until approved in writing by DOE.

The grant of this waiver is not anticipated to result in any adverse effects on competition or the public health, safety and welfare. It will serve to improve the U.S. position relative to foreign competition since UTC would help establish a domestic industry in high-latent transfer ERV products.

Considering the foregoing, and in view of the statutory objectives to be attained and the factors to be considered, it has been determined that this advance waiver of patent rights will best serve the interest of the United States and the general public. Subject to UTC providing at least thirty percent (30%) cost sharing, in aggregate over the term of this agreement, it is recommended that the waiver be granted.

[Redacted Signature]

Mark P. Dvorscak
Assistant Chief Counsel
Office of Intellectual Property Law

Date: March 15, 2002

[Redacted Signature]

Joy Alwan
Patent Attorney
Office of Intellectual Property Law

Date: 15 March 02

Based on the foregoing Statement of Consideration, it is determined that the interest of the United States and the general public will be best served by a waiver of the United States and foreign rights as set forth therein, and therefore the waiver is granted. This waiver shall not affect any waiver previously granted.

CONCURRENCE:

[Redacted Signature]

Esher R. Kweller
Program Manager
Space Conditioning and Refrigeration
EE-41

Date: 4/09/2002

APPROVAL:
[Redacted Signature]

Paul A. Gottlieb
Assistant General Counsel
For Technology Transfer and
Intellectual Property

Date: 4-10-22

WAIVER ACTION - ABSTRACT

W(A)-02-006 (CH-1090)

REQUESTOR

United Technologies
Research Center under
DOE Contract No.
DE-FC26-01NT41254

CONTRACT SCOPE OF WORK

Development and marketing of a high
latent effectiveness energy recovery
ventilator with integration into rooftop
package equipment.

RATIONALE FOR DECISION

Granting of the waiver will provide
the incentive to commercialize the
invention in a fashion which will
benefit the public in the shortest
practical time.

DISPOSITION