

Statement of Considerations

REQUEST BY LENNOX INDUSTRIES, INC. FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS IN SUBJECT INVENTIONS MADE IN THE COURSE OF OR UNDER DEPARTMENT OF ENERGY RFP SY-033-86 UNDER DOE CONTRACT NO. DE-AC05-96OR22464; DOE WAIVER DOCKET W(A)-97-020 [ORO-662]

The Petitioner, Lennox Industries, Inc., has made a timely request for an advance waiver to worldwide rights in Subject Inventions made in the course of or under RFP SY-033-86 under Department of Energy (DOE) Contract No. DE-AC05-96OR22464. This proposed project has three main purposes and two phases. One purpose is to further develop and prototype a complete Hi-Cool Interotex air conditioner. Another purpose is to design, develop, and prototype a limited quantity of "outdoor heat rejection units" suitable for GAX thermally activated heat pumps and air-conditioners. The third purpose (Phase II) is to build units in sufficient quantity for field test and demonstration. This work is sponsored by the Office of Building Equipment within the Office of Energy Efficiency and Renewable Energy.

Petitioner intends to subcontract a portion of the proposed work to Interotex Ltd. (Interotex) which has submitted a separate waiver petition (W(A)-97-019 [ORO-661]). As background, Interotex Ltd. is a technology development company headquartered in Cheltenham, England. It is co-owned by five European gas and manufacturing companies and was formed with the intent of developing and commercializing patented technology of Interotex related to rotary absorption heat pumps for use in small-scale gas fired air conditioning systems. Petitioner holds a 10.5% interest in Interotex and also holds an option to exclusively license to manufacture and sell patented Interotex design air conditioning units in North America. Moreover, as stated in its petition, Petitioner is obligated to assign new intellectual property developed for gas fired rotating heat pumps to Interotex.

Accordingly, Lennox, as an exclusive licensee of Interotex in North America, has committed to substantial U.S. manufacture of waived inventions in accordance with the modified U.S. Competitiveness provision set forth below. As shown in this clause, as the U.S. market for gas-fired air conditioners increases, Lennox will manufacture a larger percentage of the factory gate price in the U.S. This provision was negotiated with the approval of the cognizant program office.

The total amount of the proposed Phase I and Phase II project is estimated at \$972,295 with Petitioner and Interotex cost sharing 48% of that amount.

Petitioner is one of four subsidiaries under the parent company of Lennox International, headquartered in Richardson, Texas. Petitioner is a leading manufacturer of residential

and commercial heating and air conditioning equipment and related products. It is recognized as the leader in high-efficiency comfort conditioning and is the largest of the Lennox International Companies, accounting for approximately 55% of total sales of Lennox International. Considering its market position, it has the capability to commercialize the inventions developed under the RFP.

Petitioner, as a member of Interotex, has been deeply involved in rotationally enhanced heat and mass transfer development for small scale absorption systems since 1993 and has invested approximately \$1 million, to date, in Interotex technology. Thus, Petitioner's experience and commitment of resources in the technology being developed will contribute substantially to commercialization of the inventions made under the RFP.

If the requested waiver is approved, the attached Patent Rights - Waiver clause will be included in the contract. Petitioner has approved the Patent Rights -Waiver clause including march-in rights, granting of licenses to background patents necessary for practicing subject inventions, U.S. Competitiveness, U.S. Preference, and retention by the government of a license.

With respect to the U.S. Competitiveness provision, Petitioner has agreed to a modified version which is attached hereto. Petitioner has agreed that any gas-fired air conditioning system which is sold in the United States embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States, unless the Petitioner can show to the satisfaction of the DOE that it is not commercially feasible to do so. By "substantially" it is meant that at least 50% of the factory gate price of such gas fired air conditioning system will be manufactured in the United States where the Petitioner, assignee or licensee sells fewer than 20,000 systems in the United States during any continuous twelve month period and at least 85% of the factory gate price where 20,000 or more units are sold during such period. The Petitioner further agrees to make the above condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees. The cognizant DOE Program office has agreed that the terms of this modification provide potential benefit to the U.S. economy and, accordingly, has approved use of the modified provision.

The Preference for U.S. industry clause has also been modified by defining "substantially" as above to make it consistent with the above U.S. Competitiveness Provision.

With respect to market competition, while this invention may have potential in the small-scale gas fired air conditioning market, the technology has not been commercially demonstrated and its ultimate success in this country is speculative at best. In addition there are many competing technologies in the air conditioning market which will ensure

continuing competition. As such, neither the ultimate market nor the market share of any future licensee of any waived invention can be predicted at this time.

Grant of the requested waiver should serve as encouragement to other DOE contractors that significant cost sharing will be recognized as an acceptable consideration for granting greater rights in Subject Inventions.

In view of the suitable level of cost sharing by Petitioner and the objectives and considerations set forth in 10 CFR 784.4, all of which have been considered, it is recommended that the requested waiver for worldwide rights be granted.



Emily G. Schneider
Patent Attorney

Based on the foregoing Statement of Considerations and the representations in the attached Waiver Petition, it is determined that the interest of the United States and the general public will best be served by a waiver of U.S. and foreign patent rights, and therefore, the waiver is granted. This waiver shall not apply to a modification or extension of the cost-shared contract where, through such a modification or extension, the purpose, scope or cost of the contract has been substantially altered.

CONCURRENCE:



John D. Ryan, Director
Office of Building Equipment
Office of Energy Efficiency and
Renewable Energy

Date: _____

APPROVAL:



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

Date: 1-25-99

report to Patent Counsel within six months after the time the contractor: (i) Files or causes to be filed a United States or foreign patent application thereon; or (ii) Submits the final report required by paragraph (e)(2)(ii) of this clause, whichever is later.

(2) However, the Contractor shall not forfeit rights in a subject invention if, within the time specified in paragraph (m)(1) of this clause, the Contractor: (i) Prepares a written decision based upon a review of the record that the invention was neither conceived nor first actually reduced to practice in the course of or under the contract and delivers the decision to Patent Counsel, with a copy to the Contracting Officer; or (ii) Contending that the subject invention is not a subject invention, the Contractor nevertheless discloses the subject invention and all facts pertinent to this contention to the Patent Counsel, with a copy to the Contracting Officer, or (iii) Establishes that the failure to disclose did not result from the Contractor's fault or negligence.

(3) Pending written assignment of the patent application and patents on a subject invention determined by the Contracting Officer to be forfeited (such determination to be a Final Decision under the Disputes clause of this contract), the Contractor shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Government. The forfeiture provision of this paragraph shall be in addition to and shall not supersede any other rights and remedies which the Government may have with respect to subject inventions.

(u) U. S. Competitiveness. The Contractor agrees that any gas-fired air conditioning system which is sold in the United States embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States, unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. By "substantially" it is meant that at least 50% of the factory gate price of such gas fired air conditioning system will be manufactured in the United States where the Contractor, assignee or licensee sells fewer than 20,000 systems in the United States during any continuous twelve month period and at least 85% of the factory gate price where 20,000 or more units are sold during such period. The Contractor further agrees to make the above condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees.

(End of clause)