Statement of Considerations

REQUEST BY SCHWITZER U.S., INC., FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS IN SUBJECT INVENTIONS MADE IN THE COURSE OF A SUB-SUBCONTRACT UNDER DEPARTMENT OF ENERGY SUBCONTRACT NO. 86X-SM400C UNDER CONTRACT NO. DE-AC05-840R21400; DOE WAIVER DOCKET W(A)-94-010 [ORO-577]

Schwitzer U.S., Inc., (Schwitzer) has made a timely request for an advance waiver to worldwide rights in Subject Inventions made in the course of a sub-subcontract under Department of Energy (DOE) Subcontract No. 86X-SM400C. The work is sponsored by the Office of Transportation Technologies for the Advance Ceramic Manufacturing Technology Program.

Martin Marietta Energy Systems (Energy Systems), a Department of Energy contractor, has entered into a subcontract with Kyocera Industrial Ceramics Corporation (KICC) to design, test and produce improved ceramic components for automotive and truck use, particularly turbine rotors and shafts. KICC has in turn entered into a sub-subcontract with Schwitzer for the aerodynamic design of the turbine rotor, the mechanical design of the rotor and shaft to which it is attached, and the qualification testing and approval of the rotor.

The dollar amount of the sub-subcontract is \$146,990 with Schwitzer cost sharing \$73,495, 50% of the sub-subcontract, plus waiver of fee, which is 7.5% of the estimated cost or \$11,024.

Schwitzer has been in the business of designing, developing, applying and manufacturing turbochargers for this market for 40 years. They have developed, in cooperation with KICC, an 83mm ceramic rotor which has been tested by major engine manufacturers worldwide. Therefore, Schwitzer has demonstrated that it is capable of developing technology in the area of ceramic materials for automotive and truck use.

Schwitzer is a leading worldwide producer of turbochargers for the diesel engine market, having operations in Bradford, England; Lacom, Brazil; Indianapolis, Indiana; and Asheville, North Carolina. It supplies 58% of Caterpillar's turbochargers, 100% for Mack E7 engines, and 100% of John Deere's turbochargers for its 6101 engine group. In addition, it is the major supplier of turbochargers to Renault and a supplier to Volvo, Penta, Scania, Mercedes, DAF, MAN/Steyr, Iceco, KHD, Paxman, MWM, Dorman, Valmet, Perkins, and Komatsu. Considering its market position, it has the capability to commercialize the inventions developed under the sub-subcontract.

A considerable investment has already been made by Schwitzer in the development of this technology. In the development of the 83mm ceramic rotor mentioned above, the costs to date have exceeded \$200,000. It is developing ceramic parts to meet 1998 U.S. and European emissions requirements in the most costeffective manner and is in competition with many other manufacturers who are aiming at the same goal. At this time ceramics parts such as these are not being manufactured in the U.S.; however, it is Schwitzer's intention to manufacture these rotors and assemble them in the United States so that they no longer need to be purchased overseas.

The sub-subcontract has been executed and is proceeding with the standard DOE long form patent clause. If the requested waiver is approved, a patent rights clause embodying the standard DOE waiver terms and conditions, approved by Schwitzer, including march-in rights, retention by the government of a license, preference for U.S. industry, and U.S. Competitiveness clauses will be added by a no-cost modification to the sub-subcontract. The advance patent rights waiver clause will also contain a paragraph that limits Schwitzer's ability to alienate waived rights.

Consistent with the U. S. Competitiveness clause, Schwitzer agrees that any products embodying any waived invention or produced through the use of any waived invention during the term of a United States patent covering the waived invention will be manufactured substantially in the United States unless Schwitzer can show to the satisfaction of the Contracting Officer that it is not commercially feasible to do so.

Granting of the waiver should have little effect on competition since there are several competitors developing ceramic engine parts and processes for making them, this being one of many previously or yet-to-be developed in the marketplace. Therefore, there should be no undue market concentration of Schwitzer products.

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 high level of cost sharing by Schwitzer and the objectives and considerations set forth in 41 CFR 9-9.109, all of which have been considered, it is recommended that the requested waiver for worldwide rights be granted.



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 subsubcontract where, through such a modification or extension, the purpose, scope or cost of the sub-subcontract has been substantially altered.

CONCURRENCE:



Thomas J. Gross Deputy Assistant Secretary for Transportation Technologies

Date: _ 6/30/95

APPROVAL:

Paul Gottlieb Assistant General Counsel for Technology Transfer and Intellectual Property

7-5-Date: