

STATEMENT OF CONSIDERATIONS

PETITION FOR ADVANCE WAIVER OF PATENT RIGHTS BY
SCHLUMBERGER TECHNOLOGY CORP. ("SCHLUMBERGER")
UNDER COOPERATIVE AGREEMENT NO. DE-FG36-08GO18182
BETWEEN SCLUMBERGER AND DOE; W(A)-09-004; CH-1483

The Petitioner, SCLUMBERGER has requested a waiver of domestic and certain foreign patent rights for all subject inventions that may be conceived or first actually reduced to practice by SCLUMBERGER arising from its participation under the above referenced cooperative agreement entitled "HOTLINE IV – Geothermal Applications."

The objective of the project is research and development for production of a commercially viable high-temperature Downhole Electrically Submersible Pump (ESP). SCLUMBERGER has proposed to develop a Downhole ESP to operate in a high temperature environment to exploit potential use in geothermal energy and enhanced oil recovery, and provide a technically superior alternative to the line shaft pumps currently used in many applications. In particular, SCHLUMBERGER envisions potential use during recovery of viscose oil, which makes up about 2/3 of the world's known oil reserves.

The total cost of the project is approximately \$2.3 million with the Petitioner providing about 45% cost sharing. This waiver is contingent upon the Petitioner maintaining, in aggregate, the above cost sharing percentages over the course of the cooperative agreement.

As noted in its waiver petition, Petitioner is one of the leading providers of ESP systems to the oil and gas industry. SCLUMBERGER has more than 80 years of experience ESP technology development and improvement and has a long standing commitment to research and development of new technologies. SCLUMBERGER has 16 engineering centers and invests over \$30 million annually in Research and Development related to Artificial Lift. SCHLUMBERGER currently has 24 patents related to high temperature ESP either issued or in prosecution.

Considering Petitioner's technical expertise and significant investment in this technology including sizable cost sharing in this cooperative agreement, it is reasonable to conclude that Petitioner will continue to develop and ultimately commercialize the technology and products which may arise from this cooperative agreement.

Petitioner has agreed that this waiver shall be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, comparable to those set out in 35 U.S.C. 202-204. Further, Petitioner has agreed to the attached modified U.S. Competitiveness provision paragraph (t). In brief, Petitioner has agreed that a substantial portion of each electrically submersible pump system embodying any waived invention or produced through the use of any waiver invention will be manufactured in the United States, as set forth in Exhibit A, unless the Petitioner can show to the satisfaction of the DOE that it is not commercially feasible to do so.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition. Artificial lift in geothermal and oil recovery is a diverse field with widely varying requirements based on application. If successful, the ESP will provide a technically superior alternative to line shaft pumps in many, but likely not all, applications. Additionally, there are other lifting mechanisms used in the oil and gas industry. The extent of ESP utilization will depend on the economics of the applications. If anything, development of a high-temperature Downhole ESP will increase competition among currently existing artificial lift technologies.

Considering the foregoing, it is believed that granting this waiver will provide Petitioner with the necessary incentive to invest its resources in the commercialization of the results of the cooperative agreement in a fashion which will make the above technology available to the public in the shortest practicable time. Therefore, upon evaluation of the waiver petition and in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver be granted.

/Brian J.Lally/
Brian J. Lally
Assistant Chief Counsel
Intellectual Property Law Division
DOE Chicago Office

Date: May 6, 2009

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the United States and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of the cooperative agreement, where through such modification or extension, the purpose, scope or cost of the cooperative agreement has been substantially altered.

CONCURRENCE:



for Edward James Wall
Program Manager
Office of Geothermal
Technology Program
EE-2C

Date: 6/5/09

APPROVAL:



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

Date: 6/8/09

WAIVER ACTION - ABSTRACT
W(A)-09-004

REQUESTOR
SCHLUMBERGER

CONTRACT SCOPE
The objective of the project is development of a Downhole Electrically Submersible Pump for geothermal and oil recovery applications.

RATIONALE FOR DECISION
> 20% Cost Sharing

(t) U. S. Competitiveness

The Contractor agrees that any products 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 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. 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. Should the Contractor or other such entity receiving rights in any waived invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license or other transfer of rights in any waived invention is suspended until approved in writing by DOE. Contractor's agreement as set forth herein to manufacture in the U. S. will be met if a substantial portion of each electrically submersible pump system embodying any waived invention or produced through the use of any waiver invention is manufactured in the United States, as set forth in Exhibit A – Description of Manufacturing for GO18182 "HOTLINE IV – Geothermal Applications."