

Statement of Considerations

REQUEST BY GOLDEN TECHNOLOGIES, COMPANY, INC., FOR AN
ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS IN
SUBJECT INVENTIONS MADE IN THE COURSE OF OR UNDER
DEPARTMENT OF ENERGY UNDER CONTRACT NO. DE-AC05-
84OR21400; SUBCONTRACT NO. 87X-SM285C DOE WAIVER
DOCKET W(A)-94-017 [ORO-581]

Golden Technologies Company, Inc., (GTC) has made a timely request for an advance waiver to worldwide rights in Subject Inventions made in the course of or under its Subcontract No. 87X-SM285C with Martin Marietta Energy Systems, Inc. The scope of the work calls for the development of low thermal expansion, ceramic-based, "cast-in-place" diesel engine port liners. Specific tasks are fabrication of test specimens, materials requirement analysis, cost-of a high-temperature data base, and successful demonstration of metal casting around the ceramic. The ceramic based materials that will be employed in the test are a calcium magnesium zirconium potassium oxide (CMZP) and aluminum titinate. The work is sponsored by the Office of Transportation Technologies.

The dollar amount of the subcontract is \$621,227 with GTC cost sharing \$124,245 20% of the subcontract, plus waiver of fee estimated to be \$46,592.

GTC and its predecessor in interest to the technology, Coors Porcelain Company, doing business as Coors Ceramics Company (Coors), have over thirteen years experience in aluminum titinate technology. Assisting GTC will be Dr. Richard Kleiner, Director of Research and Development for GTC, who is a recognized authority in ceramics, having published over twenty articles concerning ceramic materials, applications, and production processes. GTC has subcontracts under this subcontract with Virginia Polytechnic Institute and Penn State University which own several patents related to CMZP and a related magnesium zirconium potassium oxide (MZP). Therefore, GTC and its subcontractors have the necessary experience in this area to develop the technology that is the subject of the subcontract.

GTC has a history of investing its own resources to develop, test, manufacture and introduce aluminum titanate products. GTC, along with Coors, has commercialized aluminum titanate parts for compact heat exchangers, molten metal handling equipment, and electronic parts for automobiles. Also, an aluminum titanate heat exchanger for industrial applications has been developed. Therefore, GTC's experience and expertise will contribute substantially to commercialization of the inventions made under the subcontract.

GTC sells aluminum titanate products worldwide to diverse markets, holding approximately 10% of the global market and 20% of the domestic. The market is small but is expected to increase as new products such as exhaust port liners are introduced. Considering its market position, it has the capability to commercialize the aluminum titanate products that will result from the subcontract.

The subcontract has been executed and is proceeding with the standard DOE long form patent rights clause. If the requested waiver is approved, a patent rights clause embodying the standard DOE waiver terms and conditions, approved by GTC, 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 subcontract. The advance clauses will be added also contain a paragraph that limits GTC's ability to alienate waived rights. Specifically, GTC shall not transfer rights in any invention without prior approval of DOE. Also, should there be a change in ownership of GTC, rights in inventions will be suspended until approval by DOE of the entity obtaining controlling interest having the waiver.

GTC agrees that any product, process or service used or sold by GTC or its affiliates embodying Subject Inventions must be manufactured, practiced or provided substantially in the United States, and further, any license or other transfer in rights of a Subject Invention to third parties must be approved by DOE prior to any such transfer.

Granting of the waiver should have little effect on competition since there are several technology options, this being one of many previously or yet-to-be developed in the marketplace. Therefore, there should not be undue market concentration of GTC products.

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

In view of the acceptable level of cost sharing by GTC 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.



Katherine Lovingood
Senior 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 subcontract where, through such a modification or extension, the purpose, scope or cost of the subcontract has been substantially altered.

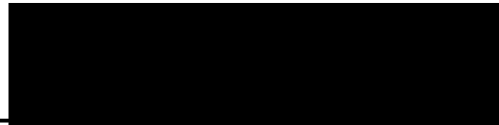
CONCURRENCE:



Thomas J. Gross
~~Acting~~ Deputy Assistant Secretary
for Transportation Technologies,
Energy Efficiency and Renewable
Energy

Date: 8/28/95

APPROVAL:



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

Date: 8-29-95

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WAIVER ACTION ABSTRACT

REQUESTOR

Golden Technologies
Company, Inc.

CONTRACT SCOPE OF WORK

Development of low thermal
expansion, ceramic-based,
"cast-in-place" diesel
engine port liners

RATIONALE FOR DECISION

Agreeing to U.S.
competitiveness provisions,
cost sharing at least 20%,
furthering efficient use
of energy

DISPOSITION

Grant waiver