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PATENT REEL: 014924 FRAME: 0682

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Title : Synthesis Gas Production by Mixed Conducting Membranes with

Integrated Conversion into Liquid Products

Inventor(s) : Shankar Nataraj; Steven Lee Russek; and Paul Nigel Dyer

Serial No. : 09/157,712 Filing Date (U.S.): September 21, 1998

Contractor : Air Products and Chemicals, Inc.

DOE Contract No. : **DE-FC26-97FT96052**

Waiver No. : W(A)-97-035 (CH-0938)

Patent Clause : 52.227-12 Patent Rights - Waiver (JUL 1996) with

952.227.14 Rights in Data - General (DOE coverage-Alternate VI) (Feb 1998)

DOE Case No. : S-95,182 - Docket No. 173PUS05840

Foreign Applications filed in or intended to be filed at Contractor's expense in (countries):

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March 6, 2000

Accordingly, this document is confirmatory of the paid-up, worldwide, license required to be granted to the Government under 10 CFR Part 784 and this contract in this invention, patent application and any resulting patent, and of all other rights acquired by the Government by the referenced clause, a copy of which is attached hereto and incorporated by reference herein. The undersigned certifies the attached copy to be a true copy of said clause. It is understood and agreed that this license does not preclude the Government from asserting rights under the provisions of said contract or of any other agreement between the Government and the Contractor, or any other rights of the Government with respect to the above-identified invention.

The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application.

	Signed this 27th day of June ,-19-2001			
(SEAL)	Air Products and Chemicals, Inc.			
	By Miles P. Drake (Contractor)			
	(Contractor's Official and Title) Vice President and Chief Technology Officer			
	(Business Address) 7201 Hamilton Boulevard, Allentown, PA 18195-1501			

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