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1046 U.S. PTO
09/783503
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Name (line 1) CHRISTOPHER J. GAUL Execution Date 02/13/01
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Name (line 1) Midwest Research Institute

Name (line 2) _____

Address (line 1) 425 Volker Boulevard

Address (line 2) _____

Address (line 3) Kansas City Missouri 64110
City State/Country Zip Code

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name Paul J. White

Address (line 1) National Renewable Energy Laboratory

Address (line 2) 1617 Cole Boulevard

Address (line 3) Golden, CO 80401

Address (line 4) _____

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03/22/2001 010421 00000123 140460 09783503
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Patent Number(s)

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If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor. Month Day Year

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Enter PCT application number PCT PCT
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Number of Properties Enter the total number of properties involved. #

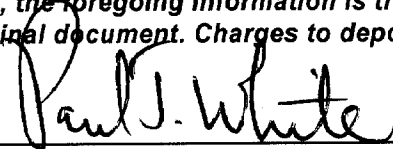
Fee Amount Fee Amount for Properties Listed (37 CFR 3.41): \$

Method of Payment: Enclosed Deposit Account
Deposit Account
(Enter for payment by deposit account or if additional fees can be charged to the account.)
Deposit Account Number: #
Authorization to charge additional fees: Yes No

Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Paul J. White
Name of Person Signing


Signature

February 13, 2001
Date

ASSIGNMENT

WHEREAS, I, Christopher J. Gaul of 10635 Dexter Drive, Thornton, County of Adams, State of Colorado has invented certain new and useful improvements in **Combined Refrigeration System with a Liquid Pre-Cooling Heat Exchanger**, for which I am about to make application for Letters Patent of the United States, said application being identified as NREL IR No. 00-33; and; executed concurrently herewith; and;

WHEREAS, I now own the entire right, title and interest therein; and

WHEREAS, Midwest Research Institute, of 425 Volker Blvd., Kansas City, Missouri 64110, a corporation fully organized and existing under the laws of the State of Missouri is desirous of acquiring the entire right, title, and interest therein and thereto;

NOW THEREFORE, be it known that for good and other consideration to me in hand paid, the receipt of which is hereby acknowledged, I, the said Min Zhang by these presents do sell, assign, and transfer unto the said Midwest Research Institute, its successors, legal representatives and assigns, my entire right, title, and interest in and to said invention and the aforesaid application, for the United States of America and for all foreign countries and to all Letters Patents, continuations and reissues, and extensions to be obtained therefor; and I further agree to cooperate with the assignee hereunder in the obtaining and sustaining of any and all such Letters Patent, but at the expense of said assignee.

The Commissioner of Patents is hereby authorized and requested to issue the Letters Patent solely in accordance with the terms of this assignment to Midwest Research Institute, its successors, legal representatives and assigns, as the assignee of the entire right, title and interest therein.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal on the date set forth hereinafter.

Arthur G. Bon

Witness

Christopher J. Gaul
Christopher J. Gaul

STATE OF COLORADO)
)
COUNTY OF JEFFERSON)

Before me, a Notary Public in and for the said County and State, personally appeared Christopher J. Gaul, known to me to be the person whose name is subscribed to the foregoing, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office, this 13th day of February, 2001.

My commission expires: Oct. 4, 2001.

Brenda E. Brantley

Brenda E. Brantley, Notary Public
State of Colorado
My Commission Expires 10/4/2001

[Seal]

Approved and consented to this _____ day of _____, 2001.

ATTEST:

MIDWEST RESEARCH INSTITUTE

By *Paul J. White*

Paul J. White, Reg. No. 30,436
Its Senior Patent Counsel