

FORM PTO-1619A  
Expires 06/30/99  
OMB 0651-0027

07-10-2001

U.S. Department of Commerce  
Patent and Trademark Office  
**PATENT**



101770865

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**Conveying Party(ies)**☒ Mark if additional names of conveying parties attached

Name (line 1) Satoshi Izawa

Execution Date  
Month Day Year  
06 12 2001

Name (line 2) **Second Party**

Name (line 1) Yoshiaki Takano

Execution Date  
Month Day Year  
06 15 2001

Name (line 2) **Receiving Party**☐ Mark if additional names of receiving parties attached

Name (line 1) DENSO CORPORATION

Name (line 2) 

Address (line 1) 1-1, Showa-cho

Address (line 2) 

Address (line 3) Kariya-city

Aichi-pref., Japan

448-8661

City

State/Country

Zip Code

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11000 U.S. PTO  
 09/894573  
 06/28/01

**PATENT**  
**REEL: 011947 FRAME: 0471**

**Correspondent Name and Address**

Area Code and Telephone Number

248-641-1600

Name H. Keith Miller, Esq.

Address (line 1) Harness, Dickey & Pierce, P.L.C.

Address (line 2) P.O. Box 828

Address (line 3) Bloomfield Hills, MI 48303

Address (line 4)

**Pages**

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# 1

**Application Number(s) or Patent Number(s)**

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**Patent Application Number(s)**

**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  
06 28 2001

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Enter PCT application number  
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Number as not been assigned.

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# 1

**Fee Amount**

Fee Amount for Properties Listed (37 CFR 3.41):

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Deposit Account ☐

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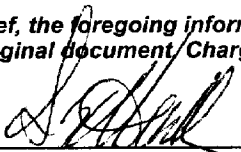
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**Statement and Signature**

*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.*

H. Keith Miller, Esq.

Name of Person Signing



Signature

June 28, 2001

Date

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Expires 06/30/99  
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Patent and Trademark Office  
**PATENT**

**Conveying Party(ies)**

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**Enter additional Conveying Parties**

Name (line 1) Mikiharu Kuwahara

Execution Date  
Month Day Year  
06 13 2001

Name (line 2)

Execution Date

Month Day Year

Name (line 1)

Name (line 2)

Execution Date

Month Day Year

Name (line 1)

Name (line 2)

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**Enter additional Receiving Party(ies)**

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**Patent Application Number(s)**

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11000 U.S. PTO  
09/894573  
06/28/01

### Sole or Joint

WHEREAS, the undersigned, hereinafter referred to as Assignor(s), have invented

## REFRIGERANT CYCLE SYSTEM WITH HOT-GAS BYPASS STRUCTURE

for which the undersigned executed an application for Letters Patent of the United States of America:

(A)       X       even date herewith

(B) \_\_\_\_\_ on

(C) \_\_\_\_\_ in U.S. Appln. No. \_\_\_\_\_ filed \_\_\_\_\_

AND WHEREAS,

**DENSO CORPORATION** of 1-1, Showa-cho, Kariya-city, Aichi-pref., 448-8661 Japan

hereinafter referred to as Assignee, is desirous of acquiring an interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt whereof is hereby acknowledged, Assignors by these presents do sell, assign and transfer unto Assignee, its successors in interest, the full and exclusive right in the United States of America and all foreign countries, including the right to claim priority under the laws of the United States and the Paris Convention, to the said invention as described in the specification executed by Assignors of even date preparatory to filing a United States application for patent therefor, said invention and all United States applications for patent and all Letters Patent therefor to be held and enjoyed by Assignee to the full end of the term for which said Letters Patent are granted and any extensions thereof as fully and entirely as the same would have been held by Assignors had this assignment and sale not been made; and Assignors hereby covenant and agree to execute all instruments or documents required or requested for the making and prosecution of United States application for patent and all foreign countries on, for litigation regarding, or for the purpose of protecting title to the said invention, the United States application for patent, or Letters Patent therefor for the benefit of Assignee without further or other compensation than that above set forth; and Assignors hereby request the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States of America to Assignee(s).

Satoshi Izawa  
Inventor 1: Satoshi Izawa

June 12, 2001  
Date

Toshitaka Shimizu  
Witness

*Yoshiaki Takano*  
Inventor 2: Yoshiaki Takano

June 15, 2001  
Date

Toshitaka Shimizu  
Witness

Mikiharu Kuwahara  
Inventor 3: Mikiharu Kuwahara

June 13, 2001  
Date

Toshitaka Shimizu  
Witness

Inventor 4:

Date \_\_\_\_\_

**Witness**

Inventor 5:

Date \_\_\_\_\_

Witness

**Inventor 6:**

Date \_\_\_\_\_

Witness

IF ADDITIONAL INVENTORS, check and continue on page 2.