

101762298

TO THE ASSISTANT COMMISSIONER OF PATENT AND TRADEMARKS  
SIR: PLEASE RECORD THE ATTACHED ORIGINAL

1. NAME OF CONVEYING PARTY(IES) (ASSIGNOR(S)):

- 1. MAKOTO SHIRAI
- 3. MASAYUKI KOBAYASHI
- 5. 6-2001
- 7.

- 2. HISAO KUROKI
- 4. HIROKAZU YAMADA
- 6.
- 8.

ADDITIONAL NAME(S) OF CONVEYING PARTY(IES) ATTACHED?  YES  NO

2. PARTY(IES) (ASSIGNEE(S)) RECEIVING INTEREST:

2-1501

NAME: DENSO CORPORATION

ADDRESS: 1-1, Showa-cho, Kariya-city, Aichi-pref. 448-0029 Japan

ADDITIONAL NAME(S) & ADDRESS(ES) ATTACHED?  YES  NO

3. NATURE OF CONVEYANCE (DOCUMENT):

(Submit herewith only one document for recordation—multiple copies of same Assignment signed by different inventors is one document)

- ASSIGNMENT OF  WHOLE  PART INTEREST
- ORIGINAL  FACSIMILE/PHOTOCOPY
- CHANGE OF NAME  VERIFIED TRANSLATION
- SECURITY  MERGER  OTHER:

EXEC. DATE: July 19, 1999

EXECUTION DATE(S) ON THE DECLARATION IF FILED HEREWITH: (NOTE: IF DATES ON DECLARATION AND ASSIGNMENT DIFFER SEE ATTY!)

4.5 APPL. NO.(S) OR PAT NO.(S). OTHERS ON ADDITIONAL SHEET(S) attached?  YES  NO

A. PAT. APP. NO.(S) series code/serial no	M#	1 <sup>st</sup> INVENTOR if not in item 1	B. PATENT NO(S)	M#	1 <sup>st</sup> INVENTOR if not in item 1
09/783,589	0274100				

5. Name & Address of Party to Whom Correspondence Concerning Document Should be Mailed:

**Pillsbury Winthrop LLP**  
Intellectual Property Group  
1600 Tysons Boulevard

McLean, VA 22102

5.5 ATTY DKT:

P 274100

U3-9908YK-B

MATTER NO.

CLIENT REF.

6. NUMBER INVOLVED:

APPLNS 1 + PATS 0 = TOTAL

1

7. AMOUNT OF FEE ENCLOSED: (Code 581)

ABOVE TOTAL x \$40 = \$40

8. IF ABOVE FEE IS MISSING OR INADEQUATE CHARGE INSUFFICIENCY TO DEPOSIT ACCOUNT NUMBER: 03-3975

UNDER ORDER NO	60388	274100
dup. sheet not required	CLIENT NO.	MATTER NO.

9.

Signature

10. Total number of pages including this cover sheet, attachments and document (do not file dup. Cover sheet)

2

Attorney: Kenneth M. Fagin

Reg. No. 37,615

Atty/Sec: KMF/emg

TEL: (703) 905-2066

Date: June 20, 2001

FAX: (703) 905-2500

FILE WITH PTO RETURN RECEIPT (PAT-103A)

RECO PATENT



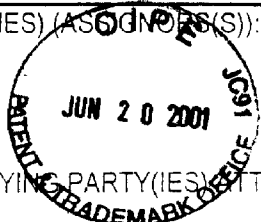
101631434

TO THE ASSISTANT COMMISSIONER OF PATENT  
SIR: PLEASE RECORD THE ATTACHED ORIGINAL DOCUMENTS OR COPY THEREOF.

1. NAME OF CONVEYING PARTY(IES) (ASSIGNOR(S)):

- 1. SHIRAI, Makoto
- 3. KOBAYASHI, Masayuki
- 5.
- 7.

- 2. KUROKI, Hisao
- 4.
- 6.
- 8.



Jc918 U.S. PTO  
09/783589  
02/15/01

ADDITIONAL NAME(S) OF CONVEYING PARTY(IES) ATTACHED?  YES  NO

2. PARTY(IES) (ASSIGNEE(S)) RECEIVING INTEREST:

NAME: DENSO CORPORATION

ADDRESS: 1-1, Showa-cho, Kariya-city, Aichi-pref. 448-0029 JAPAN

ADDITIONAL NAME(S) & ADDRESS(ES) ATTACHED?  YES  NO

C91783589

3. NATURE OF CONVEYANCE (DOCUMENT):

(Submit herewith only one document for recordation—multiple copies of same Assignment signed by different inventors is one document)

- ASSIGNMENT OF  WHOLE  PART INTEREST
- ORIGINAL  FACSIMILE/PHOTOCOPY
- CHANGE OF NAME  VERIFIED TRANSLATION
- SECURITY  MERGER  OTHER:

EXEC. DATE: July 19, 1999

EXECUTION DATE(S) ON THE DECLARATION IF FILED HEREWITH: (**NOTE:** IF DATES ON DECLARATION AND ASSIGNMENT DIFFER SEE ATTY!) July 27, 2000 and July 28, 2000

4.5 APPL. NO.(S) OR PAT NO.(S). OTHERS ON ADDITIONAL SHEET(S) attached?  YES  NO

A. PAT. APP. NO.(S) series code/serial no	M#	1 <sup>st</sup> INVENTOR if not in item 1	B. PATENT NO(S)	M#	1 <sup>st</sup> INVENTOR if not in item 1

5. Name & Address of Party to Whom Correspondence Concerning Document Should be Mailed:

Pillsbury Madison & Sutro LLP  
Intellectual Property Group  
1100 New York Avenue, NW  
Ninth Floor  
Washington, DC 20005-3918

6. NUMBER INVOLVED:  
APPLNS 1 + PATS 0 = TOTAL 1

7. AMOUNT OF FEE ENCLOSED: (Code 581)  
ABOVE TOTAL x \$40 = \$40

5.5 ATTY DKT:

PMS 274100	U3-9908-YK-A
MATTER NO.	CLIENT REF.

8. IF ABOVE FEE IS MISSING OR INADEQUATE CHARGE INSUFFICIENCY TO DEPOSIT ACCOUNT NUMBER: 03-3975		
UNDER ORDER NO	60388	274100
dup. sheet not required	CLIENT NO.	MATTER NO.

9. 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.

Signature

Attorney: Glenn J. Perry  
Reg. No. 28458  
Atty/Sec: GJP/vaw

Date: February 15, 2001  
FAX: (202) 822-0944

10. Total number of pages including this cover sheet, attachments and document (do not file dup. Cover sheet)	2
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FILE WITH PTO RETURN RECEIPT (PAT-103A)

02/22/2001 HLE333 00000019 09783589

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COPY PATENT

PAT-114X 11/1999

Please return signed/recorded to:

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USA Patent Appl.  
Sole or Joint



For Inventions made outside USA  
executed with or after application

APP# 262756 | U3-9908-YK  
M# | Client Ref.

NONPROVISIONAL

NONPROVISIONAL

# ASSIGNMENT OF NONPROVISIONAL APPLICATION

In consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration paid to each of the undersigned, to wit:

INSERT  
NAME(S) OF  
INVENTOR(S)

(1) Makoto SHIRAI	(4) Hirokazu YAMADA
(2) Hisao KUROKI	(5)
(3) Masayuki KOBAYASHI	<input type="checkbox"/> x box if continued on page 2

the receipt and sufficiency of which are hereby acknowledged by the undersigned who at the request of, hereby sell(s), assign(s) and transfer(s) unto:

INSERT  
NAME(S) OF  
ASSIGNEE(S)  
& ADDRESS(ES)

DENSO CORPORATION  
of 1-1, Showa-cho, Kariya-city, Aichi-pref. 448-0029 Japan

(hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100, in the invention and all applications including any and all divisions, continuations, substitutes, and reissues thereof, and all resulting patents, known as

TITLE OF  
INVENTION

GAS SENSOR WITH CERAMIC HEATER

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

NOTE --  
(Complete  
line A, B and/or C)

- (A)  even date herewith
- (B)  on July 19, 1999
- (C)  in U.S. Appl. No. 1 filed

AND the undersigned hereby authorize(s) and request(s) the United States Commissioner of Patents and Trademarks to issue said Letters Patent to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agree(s) that the attorney of record in said application shall hereinafter act on behalf of said ASSIGNEE;

AND the undersigned hereby agree(s) to testify and execute any papers for ASSIGNEE, its successors, assigns and legal representatives, deemed essential by ASSIGNEE to ASSIGNEE'S full protection and title in and to the invention hereby transferred.

NOTE -- The undersigned hereby authorize(s) Pillsbury Madison & Sutro, Intellectual Property Group, of the above address to insert hereon any further identification necessary or desirable for recordation of this document.

INVENTOR(S)	DATE SIGNED	WITNESSES
1) <u>Makoto Shirai</u> Name: Makoto Shirai	<u>July 19, 1999</u>	<u>Abimasa Mase</u>
2) <u>Hisao Kuroki</u> Name: Hisao Kuroki	<u>July 19, 1999</u>	<u>Abimasa Mase</u>
3) <u>Masayuki Kobayashi</u> Name: Masayuki Kobayashi	<u>July 19, 1999</u>	<u>Abimasa Mase</u>
4) <u>Hirokazu Yamada</u> Name: Hirokazu Yamada	<u>July 19, 1999</u>	<u>Abimasa Mase</u>
5) _____ Name: _____	_____	_____

IF ADDITIONAL INVENTORS, check box  and continue on page 2.