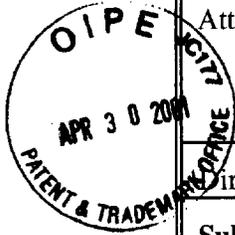


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Attorney Docket No. 00.

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Conveyance type: Assignment Security Agreement
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 Merger Other _____

Conveying Party(ies): Execution Date (03/23/2001)

First party Name: TAKEUCHI, Toshiki
(Last, First, Middle Initial)

Additional name(s) of conveying party(ies) attached? Yes ___ No ___

Receiving Party (ies):

First party Name: Sanyo Electric Co., Ltd.
Address: 5-5, 2-chome, Keihan-hondori, Moriguchi-shi, Osaka, Japan

Additional name(s) & address(es) attached? Yes ___ No

Domestic Representative Name and Address (Enter for the first Receiving Party only)

ARMSTRONG, WESTERMAN, HATTORI, McLELAND & NAUGHTON LLP
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Application Number(s) or Patent Number(s) Additional numbers attached? Yes ___ No XX

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09/662,330

B. Patent No.(s)

If this document is being filed together with a new application, enter the date the application was signed by the first named executing inventor: _____
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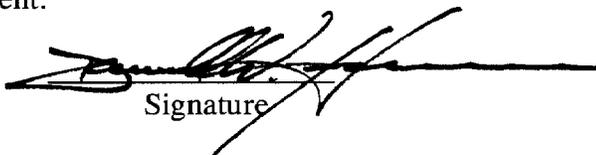
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Statement and signature

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.

Donald W. Hanson
Name of Person Signing


Signature

April 30, 2001
Date

27,133
Registration No.

U.S. ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter ASSIGNOR) by

(Insert
ASSIGNEE's
Name(s)
Address(es))

SANYO ELECTRIC CO., LTD, 5-5, 2-chome, Keihan-hondori, Moriguchi-shi, Osaka, Japan

(hereinafter ASSIGNEE), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled

(Title of Invention)

HEAT CARRIER

(*If the assignment is being filed after the filing of the application, this section must be completed)

for which application for Letters Patent of the United States was executed on even date herewith unless otherwise indicated below:

*filed on September 14, 2000, Serial No. 09/662,330.
(Armstrong, Westerman, Hattori, McLeland & Naughton, LLP is hereby authorized to insert the series code, serial number and/or filing date hereon, when known)

and all Letters Patent of the United States to be obtained therefor on said application or any continuation, divisional, substitute, reissue or reexamination thereof for the full term or terms for which the same may be granted.

The ASSIGNOR agrees to execute all papers necessary in connection with the application and any continuation, divisional, reissue or reexamination applications thereof and also to execute separate assignments in connection with such applications as the ASSIGNEE may deem necessary or expedient.

The ASSIGNOR agrees to execute all papers necessary in connection with any interference, litigation, or other legal proceeding which may be declared concerning this application or any continuation, divisional, reissue or reexamination thereof or Letters Patent or reissue patent issued thereon and to cooperate with the ASSIGNEE in every way possible in obtaining and producing evidence and proceeding with such interference, litigation, or other legal proceeding.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s).

(Signatures)

Toshiki Takeuchi

(SIGNATURE)

Toshiki TAKEUCHI

(TYPE NAME)

23 May 2001

(DATE)

(SIGNATURE)

(TYPE NAME)

(DATE)

NO LEGALIZATION REQUIRED