

S&H 9/92

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**PATENTS ONLY**

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying parties:

- (1) Satoshi TAKATSUGI
- (2) Wataru SHIRAIISHI
- (3) Toshio ISHIGURO

04-03-2000



2. Name and address of receiving party:

101303163

FANUC LTD.  
3580, Shibokusa Aza-komanba, Oshino-mura  
Minamitsuru-gun, Yamanashi, 401-0597 Japan



3. Nature of conveyance:

- Assignment
- Security Agreement
- Other: \_\_\_\_\_
- Merger
- Change of Name

Execution Date(s): March 1, 2000

4. Application number(s) or patent number(s):

This document is being filed together with a new application:

- (a) The execution date(s) of the application is/are: March 1, 2000
- (b) The title is: TEMPERATURE CONTROL DEVICE FOR A PROXIMAL PORTION OF A HEATING CYLINDER OF AN INJECTION MOLDING MACHINE  
\*\*\* OR \*\*\*

This document is being filed after filing of the application:

- (a) Patent Application No(s). \_\_\_\_\_, filed \_\_\_\_\_; or
- (b) Patent No(s). \_\_\_\_\_, issued \_\_\_\_\_.

09/528715

5. Name and address of party to whom correspondence concerning document should be mailed:

STAAS & HALSEY  
700 Eleventh Street, N.W.  
Suite 500  
Washington, D.C. 20001

Our Docket: 392.1679/JDH

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41)..... \$ 40.00

- Enclosed
- Authorized to be charged to deposit account.

8. Deposit Account No.: 19-3935 (Any underpayment is authorized to be charged to this Deposit Account)  
(Attach duplicate copy of this page if paying by deposit account)

9. Statement and signature.

**03/29/2000 KHALING 0000010 09528715**  
**02 FC:581**  
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.

40.00 OP

James D. Halsey, Jr., Reg. No. 22,729  
Name of Person Signing

Signature

March 15, 2000  
Date

Total number of pages comprising cover sheet: 2

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# U.S. ASSIGNMENT

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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 Name(s) & Address(es) of ASSIGNEE(S))

FANUC LTD.

3580, Shibokusa, Aza-komanba, Oshino-mura,  
Minamitsuru-gun, Yamanashi, 401-0597 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)

TEMPERATURE CONTROL DEVICE FOR A PROXIMAL PORTION OF A  
HEATING CYLINDER OF AN INJECTION MOLDING MACHINE

relating to International Patent Application PCT/JP\_\_\_\_\_/\_\_\_\_\_ and/or for which application for Letters Patent of the United States was executed on even date herewith or, if not so executed, was:

(a) executed on \_\_\_\_\_; (Insert date of execution of application, if not concurrent)

(b) filed on \_\_\_\_\_,  
Serial No. \_\_\_\_/\_\_\_\_\_;

Any registered attorney of STAAS & HALSEY, 700 Eleventh Street, N.W., Washington, D.C. 20001 (202/434-1500) is hereby authorized to insert in (b) the specified data, when known.

and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, reexamination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing sworn testimony, and obtaining and producing evidence.

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

	(Typed Name & Signature of Inventor(s))	(Date)	(Typed Name & Signature of Witness(es))
1)	<u>Satoshi Takatsugi</u> Satoshi TAKATSUGI	March 1, 2000	<u>Harumi Omori</u> Harumi OMORI
2)	<u>Wataru Shiraiishi</u> Wataru SHIRAIISHI	March 1, 2000	<u>Harumi Omori</u> Harumi OMORI
3)	<u>Toshio Ishiguro</u> Toshio ISHIGURO	March 1, 2000	<u>Harumi Omori</u> Harumi OMORI
4)	_____	_____	_____
5)	_____	_____	_____
6)	_____	_____	_____

RECORDED: 03/20/2000

PATENT  
REEL: 010644 FRAME: 0666