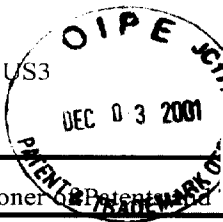


Atty Docket No.: 192055US3

FORM PTO-1595
1-31-92



12-06-2001



U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

101908430

To the Honorable Commissioner of Patents and Trademarks, Patent and Trademark Office, Washington, D.C. 20231
Original documents or copy thereof.

1. Name of conveying party(ies):

Takashi SHIMAZU and Hiroshi AOKI

2. Name and address of receiving party(ies):

Name: KABUSHIKI KAISHA TOYOTA CHUO
KENKYUSHO

Address: 41-1, Aza Yokomichi, Oaza Nagakute,
Nagakute-cho, Aichi-qun,
Aichi-ken, 480-1192 Japan

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

3. Nature of Conveyance:

- Assignment
- Security Agreement
- Other
- Merger
- Change of Name

Execution Date: May 9, 2000

Additional name(s) and address(es) attached? Yes No

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

If this document is being filed together with a new application, the execution date of the application is: N/A

A. Patent Application No.(s)

09/572,428

B. Patent No.(s)

Additional numbers attached? Yes No

5. Name and address of party to whom correspondence



22850

concerning document should be mailed:

6. Total 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 number: 15-0030
(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

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.

C. Irvin McClelland

Name of Person Signing

Registration Number: 21,124

Joseph A. Scafetta, Jr.
Signature

Dec. 3, 2001
Date

Joseph A. Scafetta, Jr.
Registration No. 26,803

Total number of pages including this cover sheet: 3

Do not detach this portion

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks
Box Assignments
Washington, D.C. 20231

12/05/2001 DBYRNE 00000080 09572428
01 FC:581 40.00 DF

PATENT
REEL: 012336 FRAME: 0091

I (WE) hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letter Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of Oblon, Spivak, McClelland, Maier & Neustadt, P.C. of Fourth Floor, 1755 Jefferson Davis Highway, Arlington, Virginia 22202 the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Date: May 9, 2000 _____
(Signature of Inventor) *Takashi Shimazu*
Takashi SHIMAZU

Date: May 9, 2000 _____
(Signature of Inventor) *Hiroshi Aoki*
Hiroshi AOKI

Date: _____
(Signature of Inventor)

Date: _____
(Signature of Inventor)

Date: _____
(Signature of Inventor)

Date: _____
(Signature of Inventor)

Date: _____
(Signature of Inventor)

Date: _____
(Signature of Inventor)

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.
ATTORNEYS AT LAW
FOURTH FLOOR
1755 JEFFERSON DAVIS HIGHWAY
ARLINGTON, VIRGINIA 22202