

11-04-2002



102270477

Director of the U.S. Patent and Trademark Office  
Box Assignments  
Washington, D.C. 20231

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

7.12.02

Attorney Docket No. 113003

To the Director of the U.S. Patent and Trademark Office: Please record the attached original document or copy thereof.

1. A. Name of conveying party:  
Takeo KAWASE  
  
B. Additional name(s) of conveying party(ies) attached?  
 Yes  No

2. A. Name and address of receiving party:  
SEIKO EPSON CORPORATION  
4-1, NISHISHINJUKU 2-CHOME,  
SHINJUKU-KU, TOKYO  
163-0811, JAPAN

3. A. Nature of conveyance:  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Other \_\_\_\_\_  
  
B. Execution Date: July 2, 2002

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

4. A. If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_  
B. Patent Application No.(s) 10/149,392  
C. Patent No.(s) \_\_\_\_\_  
Additional numbers attached?  Yes  No

5. Name and address of party to whom correspondence concerning document should be mailed:  
  
Name: James A. Oliff  
  
Address: **OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, VA 22320**

6. Total number of applications and patents involved: 1  
  
7. A. Total fee (37 CFR 3.41).....\$ 40.00  
B. Enclosed (Check No. 132510)  
  
8. Credit any overpayment or charge any underpayment to deposit account number 15-0461.

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.

James A. Oliff Registration No. 27,075  
Joel S. Armstrong Registration No. 36,430

Date: July 12, 2002

Total number of pages including cover sheet, attachments, and document: 2

ASSIGNMENT

(1-8) Insert Name(s) of Inventor(s) (1) Takeo KAWASE (5) (2) (6) (3) (7) (4) (8)

In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, each undersigned agrees to assign, and hereby does assign, transfer and set over to

(9) Insert Name of Assignee (9) Seiko Epson Corporation (10) Insert Address of Assignee (10) 4-1, Nishishinjuku 2-chome, Shinjuku-ku, Tokyo 163-0811, Japan

(hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, he entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, substitute, and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as

(11) Insert Identification Such as Title, Case Number, or Foreign Application Number (11) Etching Process (Attorney Docket No. 113003)

for which the undersigned has (have) executed an application for patent in the United States of America on even date herewith or

(12) Insert Date of Signing of Application (12) on July 2, 2002

(13) Alternative identification for filed applications (13) U.S. application Serial number 10/149,392 filed July 12, 2002

- 1) Each undersigned agrees to execute all papers necessary in connection with any application and any continuing, divisional or reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.
2) Each undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.
3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.
5) Each undersigned authorizes and requests the Director of Patents to issue any and all Letters Patents of the United States resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he has full rights to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreements in conflict herewith, and agrees that this assignment is binding on him and his heirs, successors, assigns and legal representatives.
6) Each undersigned hereby grants the firm of OLLIFF & BERRIDGE, PLC the power to insert on this assignment any further identification that 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.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date July 2, 2002 Inventor Signature [Signature] (SEAL)
Date Inventor Signature (SEAL)
Date Inventor Signature (SEAL)
Date Inventor Signature (SEAL)
Date Inventor Signature (SEAL)
Date Inventor Signature (SEAL)
Date Inventor Signature (SEAL)
Date Inventor Signature (SEAL)

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Date 2 July 2002 Witness [Signature]
Date 2 July 2002 Witness [Signature] PATENT