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To the Honorable Commissioner of Patents and Trademarks Attached original documents or copy thereof.

1. Name of conveying party(ies):  
Yoichi ISHIHARA and Toshiharu HIRAI  
Additional name(s) of conveying party(ies) attached?  Yes  No

2. Name and address of receiving party(ies)  
Name: CATALYSTS & CHEMICALS INDUSTRIES CO., LTD.  
Internal Address:  
Street Address: 580, Horikawa-cho, Saiwai-ku, Kawasaki-shi, Kanagawa 212-0013 Japan  
City: State: Zip:  
Additional name(s) & address(es) attached?  Yes  No

3. Nature of conveyance:  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Other  
Execution Date: August 4, 2003

4. Application number(s) or patent number(s): 10/473052  
If this document is being filed together with a new application, the execution date of the application is: August 4, 2003  
A. Patent Application No.(s) B. Patent No.(s)  
Additional numbers attached?  Yes  No

5. Name and address of party to whom correspondence concerning document should be mailed:  
Name: Kent E. Baldauf, Sr.  
Internal Address: Webb Ziesenheim Logsdon Orkin & Hanson, P.C.  
Street Address: 700 Koppers Building  
436 Seventh Avenue  
City: Pittsburgh State: PA Zip: 15219

6. Total number of applications and patents involved: 1  
7. Total fee (37 CFR 3.41)..... \$ 40  
 Enclosed  
 Authorized to be charged to deposit account  
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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.*  
Kent E. Baldauf, Sr., Reg. No. 25,826  
Name of Person Signing Signature Date September 29, 2003  
Total number of pages including cover sheet, attachments, and documents: 3

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PATENT  
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## ASSIGNMENT

WHEREAS, WE, Yoichi ISHIHARA and Toshiharu HIRAI, residing in c/o Wakamatsu Plant, CATALYSTS & CHEMICALS INDUSTRIES CO., LTD., 13-2, Kitaminato-machi, Wakamatsu-ku, Kitakyushu-shi, Fukuoka 808-0027 Japan, respectively, have invented certain new and useful improvements in the invention entitled "FINE METAL PARTICLES, PROCESS FOR PRODUCING THE FINE PARTICLES, COATING LIQUID FOR TRANSPARENT CONDUCTIVE COATING FILM FORMATION CONTAINING THE FINE PARTICLES, SUBSTRATE WITH TRANSPARENT CONDUCTIVE COATING FILM, AND DISPLAY DEVICE," for which we have this day executed an application for United States Letters Patent;

AND, WHEREAS CATALYSTS & CHEMICALS INDUSTRIES CO., LTD., a corporation of Japan, having a place of business at 580, Horikawa-cho, Saiwai-ku, Kawasaki-shi, Kanagawa 212-0013 Japan, hereinafter called the "assignee", is desirous of acquiring the entire right, title, and interest in and to said application and the inventions and improvements therein disclosed.

NOW, THEREFORE, for good and valuable consideration paid to us by said assignee, the receipt of which is hereby acknowledged, we do hereby assign, sell, transfer, and set over unto said assignee the entire right, title and interest in and to said application and the inventions and improvements therein disclosed for the United States and all foreign countries and any Letters Patent which may issue therefor in the United States and all foreign countries and all divisions, reissues, continuations, continuations-in-part, renewals, and/or extensions thereof, said assignee to have and to hold the interests herein assigned to the full ends of the terms of said Letters Patent and any and all divisions, reissues, continuations, continuations-in-part, renewals, and/or extensions thereof, respectively, as fully and entirely as the same would have been held and enjoyed by us had this assignment not been made.

The Commissioner for Patents is requested to issue such Letters Patent in accordance herewith. We covenant that we are the lawful owners of the said application, inventions, and improvements, that the same are unencumbered, that no license has been granted to make, use, or vend the said inventions or improvements or any of them, and that we have the full right to make this assignment.

And for the consideration aforesaid, we agree jointly and individually that we will communicate to said assignee or the representatives thereof any facts known to us respecting said inventions and improvements, and will, upon request, but without expense to us, testify in any legal proceedings, sign all lawful papers, execute all divisional, reissue, continuation, continuation-in-part, renewal, and/or extension applications, make all rightful oaths, and generally do all other and further lawful acts, deemed necessary or expedient by said assignee or by counsel for said assignee, to assist or enable said assignee to obtain and enforce full benefits from the rights and interests herein assigned. This assignment shall be binding upon our heirs, executors, administrators, and/or assigns, and shall inure to the benefit of the heirs, executors, administrators, successors, and/or assigns, as the case may be, of said assignee.

Date August 4, 2003

Inventor

*Yoichi ISHIHARA*

Yoichi ISHIHARA

Date August 4, 2003

Inventor

*Toshiharu HIRAI*

Toshiharu HIRAI