



06-24-2003
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Conveyance Type

Assignment Security Agreement

License Change of Name

Merger Other _____

U.S. Government
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Departmental File Secret File

Conveying Party(ies)

Mark if additional names of conveying parties attached

Execution Date		
Month	Day	Year
05	15	2003

Name (line 1) Shu-Ing Ju

Name (line 2) _____

Second Party

Execution Date		
Month	Day	Year
05	15	2003

Name (line 1) Hee Wong

Name (line 2) _____

Receiving Party

Mark if additional names of receiving parties attached

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 1) National Semiconductor Corporation

Name (line 2) _____

Address (line 1) 2900 Semiconductor Drive

Address (line 2) _____

Address (line 3) Santa Clara California 95051
City State/Country Zip Code

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name _____

Address (line 1) _____

Address (line 2) _____

Address (line 3) _____

Address (line 4) _____

06/23/2003 TDIAZ1 00000097 140448 10379368
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Area Code and Telephone Number

(972) 628-3600

Name

Docket Clerk

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Dallas, Texas 75380

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Pages

Enter the total number of pages of the attached conveyance document including any attachments.

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2

Application Number(s) or Patent Number(s)

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

10/379,368

Patent Number(s)

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year

Patent Cooperation Treaty (PCT)

Enter PCT application number only if a U.S. Application Number has not been assigned.

PCT

PCT

PCT

PCT

PCT

PCT

Number of Properties

Enter the total number of properties involved.

#

1

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41): \$

40.00

Method of Payment:
Deposit Account

Enclosed

Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number:

#

140448

Authorization to charge additional fees:

Yes

No

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. Charges to deposit account are authorized, as indicated herein.

William A. Munck

Name of Person Signing

William A. Munck
Signature

June 16, 2003
Date

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ASSIGNMENT OF APPLICATION

Docket Number (Optional)
P05455

Whereas, I, Shu-Ing Ju of Palo Alto, California, hereafter referred to as applicant, have invented certain new and useful improvements in FAST ADAPTING FILTER

for which an application for a United States Patent was filed on March 4, 2003,
Application Number 10/ 379,368.

for which an application for a United States Patent was executed on _____, and

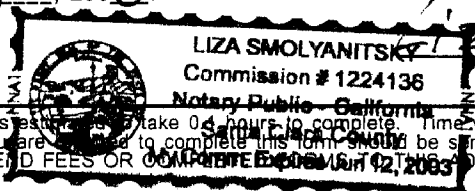
Whereas, National Semiconductor Corporation of Santa Clara, California 95051 herein referred to "assignee" whose post office address is 2900 Semiconductor Drive is desirous of acquiring the entire right, title and interest in the same;

Now, therefore, in consideration of the sum of two dollars (\$ 2.00), the receipt whereof is acknowledged, and other good and valuable consideration, I, the applicant, by these presents do sell, assign and transfer unto said assignee the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to any and all Patents which may be granted therefor in the United States, I hereby authorize and request the Commissioner of Patents and Trademarks to issue said United States Patent to said assignee, of the entire right, title, and interest in and to the same, for his sole use and behoof; and for the use and behoof of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made.

Executed this 15th day of May, 2003,
at National Semiconductor

[Signature]
(Signature)

State of California SS:
County of Santa Clara
Before me personally appeared said Shu-Ing Ju
and acknowledged the foregoing instrument to be his free act and deed this 15th
day of May, 2003.

Seal

LIZA SMOLYANITSKY
Commission # 1224136
Notary Public - California

Liza Smolyanitsky
(Notary Public)

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETE EXPIRES JUN 12, 2003. ADDRESS. SEND TO: Commissioner of Patents and Trademarks, Washington, DC 20231.

ASSIGNMENT OF APPLICATION

Docket Number (Optional)
P05455

Whereas, I, Hee Wong of San Jose, California, hereafter referred to as applicant, have invented certain new and useful improvements in FAST ADAPTING FILTER

for which an application for a United States Patent was filed on March 4, 2003,
Application Number 10 / 379,368.

for which an application for a United States Patent was executed on _____, and

Whereas, National Semiconductor Corporation of Santa Clara, California 95051 herein referred to "assignee" whose post office address is 2900 Semiconductor Drive is desirous of acquiring the entire right, title and interest in the same;

Now, therefore, in consideration of the sum of two dollars (\$ 2.00), the receipt whereof is acknowledged, and other good and valuable consideration, I, the applicant, by these presents do sell, assign and transfer unto said assignee the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to any and all Patents which may be granted therefor in the United States, I hereby authorize and request the Commissioner of Patents and Trademarks to issue said United States Patent to said assignee, of the entire right, title, and interest in and to the same, for his sole use and behoof; and for the use and behoof of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made.

Executed this May 15th day of 2003,
at National Semiconductor

Hee Wong
(Signature)

State of California SS:
County of Santa Clara
Before me personally appeared said Hee Wong
and acknowledged the foregoing instrument to be his free act and deed this
day of 5/15, 2003.

Liza Smolyanitsky
(Notary Public)



Burden Hour Statement: This form is intended to take Santa Clara County. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETE THIS FORM TO THE ADDRESS. SEND TO: Commissioner of Patents and Trademarks, Washington, DC 20231.