

FORM PTO-1619A
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U.S. Department of Commerce
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11/17 U.S. PTO
29/150003

10/30/01

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New

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Conveyance Type

Assignment Security Agreement

License Change of Name

Merger Other

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Departmental File Secret File

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Mark if additional names of conveying parties attached

Execution Date
Month Day Year

Name (line 1)

10/26/2001

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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)			Patent Number(s)		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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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 <input type="text"/>	PCT <input type="text"/>	PCT <input type="text"/>
PCT <input type="text"/>	PCT <input type="text"/>	PCT <input type="text"/>

Number of Properties Enter the total number of properties involved. #

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

Method of Payment: Enclosed Deposit Account


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

Deposit Account Number: #

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.

Morton J. Rosenberg  10/29/01

Name of Person Signing Signature Date

ASSIGNMENT DEED

This Assignment agreement is applicable to an invention entitled (invention Title) SPEAKER

The PATENT RIGHTS referred to in this agreement are:

- (Check one) a Patent Application for this invention, executed by the ASSIGNOR(s) concurrently with this Assignment
- U.S. Patent Application Serial No. _____, filed _____
- U.S. Patent No. _____, issued _____

The PATENT RIGHTS assigned under this agreement are:

- (Check one) U.S. Patent rights only
- worldwide Patent rights. In this case, the assignee shall have the right to claim the benefit of the filing date of any U.S. Patent Application identified above.

The ASSIGNOR(s) referred to in this agreement is (or are):

(Full name of first assignor) PING-HSIUNG LIU
 (Address) 9F, No. 3, Lane 28, Section 2, Hsin Sheng N. Rd., Chung Shan District, Taipei, Taiwan, R.O.C.

(Full name of second assignor, if any) _____
 (Address) _____

(Full name of third assignor, if any) _____
 (Address) _____

(Full name of fourth assignor, if any) _____
 (Address) _____

The First ASSIGNEE referred to in this agreement is:

(Name of Assignee) CALIX TECHNOLOGY CO., LTD.
 (Address of Assignee) No. 128, Jen Ho Rd., Tainan, Taiwan, R.O.C.

The Second ASSIGNEE referred to in this agreement is:

(Name of Assignee) _____
 (Address of Assignee) _____

The First ASSIGNEE is:

- (Check one) an individual
- a partnership
- a Corporation of Taiwan, R.O.C.
 (State or Country)

The Second ASSIGNEE is:

- (Check one) an individual
- a partnership
- a Corporation of _____
 (State or Country)

Additional assignees are being named on separately numbered sheets attached hereto.

The ASSIGNOR(S), in consideration of \$1.00 paid by each ASSIGNEE, and other good and valuable consideration, receipt of which is acknowledged, have and do hereby assign the following to each ASSIGNEE; their successors and assigns:

the full and exclusive right to the invention;
 an equal interest in and to the entire right, title and interest in and to the PATENT RIGHTS in the invention, all continuations, continuations-in-part, divisionals, re-issues, and re-examination patents and patent applications; and the right to claim priority under 35 U.S.C. 119, based on any earlier foreign applications for this invention.

As to all U.S. Patent Applications assigned under this Agreement, the ASSIGNOR(S) hereby authorize(s) and requests the Director of Patents and Trademarks to issue all Letters Patent to the ASSIGNEE(s) as the ASSIGNEE(s) of an equal interest in the entire right, title and interest, for the sole use and enjoyment of said ASSIGNEE(s), their successors and assigns.

Further, the ASSIGNOR(s) agree(s) to communicate to said ASSIGNEE(s), or their representatives, any facts known to the ASSIGNOR(s) respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, substitute, renewal, reexamination and reissue applications, execute all necessary assignment papers to cause any and all Letters Patent to be issued to said ASSIGNEE(s), make all rightful oaths and generally do everything necessary or desirable to aid said ASSIGNEE(s), their successors and assigns, to obtain and enforce proper protection for said invention.

<u>Ping-Hsiung Liu</u> (Signature of sole or first assignor)	<u>10/26/2001</u> (Date)
PING-HSIUNG LIU (LIU IS FAMILY NAME)	
_____ (Signature of second assignor, if any)	_____ (Date)
_____ (Signature of third assignor, if any)	_____ (Date)
_____ (Signature of fourth assignor, if any)	_____ (Date)