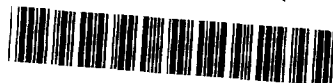


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Patent and Trademark Office



101574901

To the Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

PIERRAT, Christophe; and ZHANG, Youping

Additional name(s) of conveying party(ies) attached?

☐ Yes ☒ No

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

Name: **Numerical Technologies, Inc.**Street Address: **70 West Plumeria Drive**City/State/Zip: **San Jose, CA 95134-2134**

Additional name(s) & address(es) attached?

☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ OtherExecution Date: **12/20/2000**

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:

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: Jeanette S. Harms, Esq.
Bever, Hoffman & Harms, LLP
2099 Gateway Place, Suite 320
San Jose, CA 95110-1017**6. Total number of applications and patents involved: **[1]**7. Total fee (37 CFR 3.41)..... **\$40.00**☒ Enclosed☐ Authorized to be charged to deposit account8. Deposit account number: **50-0574**

(Attorney Docket No.:)

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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.***Jeanette S. Harms**

Name of Person Signing

Signature

12/20/2000

Date

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

ASSIGNMENT

For good and valuable consideration, receipt of which is hereby acknowledged, we

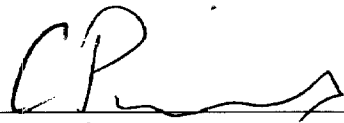
Christophe Pierrat of 420 Riverside Court, Apt. 307, Santa Clara, CA 95054
Youping Zhang of 37151 Magnolia Street, Newark, CA 94560

hereby sell, assign and transfer to **Numerical Technologies, Inc., a Delaware corporation**, having a place of business at **70 West Plumeria Drive, San Jose, CA, 95134-2134**, its successors and assigns, the entire right, title and interest throughout the world in our invention in

**STRUCTURE AND METHOD OF CORRECTING PROXIMITY EFFECTS IN A TRI-TONE
 ATTENUATED PHASE-SHIFTING MASK**

for which we will execute a United States patent application on or about the date of this assignment, and all patent applications and patents of every country for said invention, including divisions, reissues, continuations and extensions thereof, and all rights of priority resulting from the filing of said applications; we authorize the above-named assignee to apply for patents of foreign countries for said invention, and to claim all rights of priority without further authorization from us; we agree to execute all papers useful in connection with said United States and foreign applications, and generally to do everything possible to aid said assignee, their successors, assigns and nominees, at their request and expense, in obtaining and enforcing patents for said invention in all countries; and we request the Commissioner of Patents and Trademarks to issue all patents granted for said invention to the above-named assignee, its successors and assigns.

Executed this 20th day of December, 2000.


 Christophe Pierrat

State of California)
) ss.
 County of Santa Clara)


CAPACITY CLAIMED BY SIGNER
 () individual(s) signing for
 [X] oneself/themselves

On _____ before me, _____, personally appeared Christophe Pierrat [] personally known to me --or-- [X] proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

12/20/2000
 Signature

Executed this 20 day of December, 2000.


 Youping Zhang

State of California)
) ss.
 County of Santa Clara)

CAPACITY CLAIMED BY SIGNER
 () individual(s) signing for
 [X] oneself/themselves

On _____ before me, _____, personally appeared Youping Zhang [] personally known to me --or-- [X] proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

 Signature