

10-18-2001

Form PTO-1595 (Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002)



U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office

Tab settings 101877702

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

1. Name of conveying party(ies): 10-10-01 Vasilis Papanikolaou Apu Sivadas Atul Gupta Hossein Shakiba Additional name(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies) Name: Gennum Corporation Internal Address: Street Address: 970 Fraser Drive Burlington, Ontario CANADA L7L 5P5 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 29, 2001

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) 09/940,053 B. Patent No.(s) Additional numbers attached? Yes No

5. Name and address of party to whom correspondence concerning document should be mailed: Name: Joseph M. Sauer, Esq. Internal Address: Jones, Day, Reavis & Pogue North Point Street Address: 901 Lakeside Avenue City: Cleveland State: Ohio Zip: 44114

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 account: *Overpayment or underpayment 8. Deposit account number: 591432 (Ref. 764164605017) (Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

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. Suzanne Koston Name of Person Signing Signature Date 10/5/2001

Total number of pages including cover sheet, attachments, and documents: 6

Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks, Box Assignments Washington, D.C. 20231

PATENT REEL: 012246 FRAME: 0540

10/18/2001 LMUELLER 0000033 0994003 40.00 01 FC:581

ASSIGNMENT

WHEREAS, new and useful improvements have been made by the undersigned in

ADAPTIVE EQUALIZER WITH LARGE DATA RATE RANGE

and are the subject of a patent application filed with the United States Patent and Trademark Office on August 27, 2001, and assigned Serial No. 09/940,053, and executed by the undersigned on the dates indicated below in the appropriate spaces to the left of the signatures of the under signed, which application is further identified as Jones, Day, Reavis & Pogue Docket No. 764164605017.


WHEREAS, GENNUM CORPORATION, a corporation organized under the laws of the Province of Ontario, CANADA, having a place of business at 970 Fraser Drive, Burlington, Ontario, CANADA L7L 5P5, hereinafter referred to as "assignee", is desirous of acquiring all right, title, and interest throughout the world in, to, and under said improvements and inventions and patent rights therefor.

NOW, THEREFORE, be it known that, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, all right, title, and interest, in the United States and throughout the world, in, to and under said improvements and inventions and all patents, patent applications, patent rights, and inventor's certificates thereof, therefor, and therein, including without limitation said application for patent in the United States, all divisions and continuations thereof, all patents which may be granted thereon, all reissues and extensions thereof, all right to sue for past infringement thereunder, all patents which may be granted for said improvements and inventions by states or nations other than the United States, or by other authority, entity, or organization, and all applications therefor, have been and are hereby sold, assigned, transferred, and delivered unto assignee, its successors and assigns; and it is covenanted and agreed by the undersigned, and for executors, administrators, and legal representatives of the undersigned, that at assignee's request any and all applications, affidavits, assignments, and other instruments will be made, executed, and delivered as may be necessary, or desirable to secure for or vest in assignee, its successors or assigns, any improvement, inventions, right, title, interest, application, patent, patent right or other right or property covered by this assignment, and the United States Commissioner of Patents and Trademarks is hereby requested and authorized to issue any and all United States patents granted on any of said applications to assignee as owner of the entire right, title, and interest in, to, and under the same, and appropriately empowered officials of foreign countries are hereby authorized to issue any letters patent granted on any of said applications to assignee as owner of the entire right, title and interest in, to, and under the same.

The undersigned hereby grants the firm of Jones, Day, Reavis & Pogue the power to insert on this assignment any further identification which 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, this assignment has been executed below by the undersigned:

Date: Aug. 29/2001



Vasilis Papanikolaou
156 Evelyn Avenue
Toronto, Ontario M6P 2Z7
Canada

STATEMENT BY WITNESS

I, Mansour Shashaani, whose full Post Office
(Name of Witness)

address is 55 William St. E. Apt. # 805, Waterloo, Ontario, N2J 4Z1
(Address of Witness)

hereby declare that I was personally present and did see the above named person, personally known to me to be the person named in the assignment, duly sign and execute the same.


Date: Aug. 29/2001



(Signature of Witness)

IN WITNESS WHEREOF, this assignment has been executed below by the undersigned:

Date: 29 AUG 2001



Apu Sivadas
904-705 Surrey Lane
Burlington, Ontario L7T 3Z4
Canada

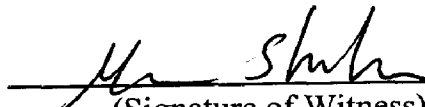
STATEMENT BY WITNESS

I, Mansour Shashaani, whose full Post Office
(Name of Witness)

address is 55 William St. E. Apt. #805, Waterloo, Ontario N2J 4Z1
(Address of Witness)

hereby declare that I was personally present and did see the above named person, personally known to me to be the person named in the assignment, duly sign and execute the same.

Date: Aug. 29, 2001


_____ (Signature of Witness)

IN WITNESS WHEREOF, this assignment has been executed below by the undersigned:

Date: 29 AUG 01

Atul Krishna Gupta

Atul Gupta
Unit # 9, 5958 Greensboro Drive
Mississauga, Ontario L5M 5Z9
Canada

STATEMENT BY WITNESS

I, Eliyahu Dan Zamir, whose full Post Office
(Name of Witness)

address is 81 8 Covington Rd., Apt. 1406, Toronto, Ontario, M6A 3E5
(Address of Witness)

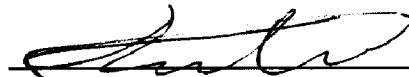
hereby declare that I was personally present and did see the above named person, personally known to me to be the person named in the assignment, duly sign and execute the same.

Date: August 29, 2001

Eli Zamir
(Signature of Witness)

IN WITNESS WHEREOF, this assignment has been executed below by the undersigned:

Date: Sept. 14/01



Hossein Shakiba
44 Brimwood Cres.
Richmond Hill, Ontario L4B 4B6
CANADA

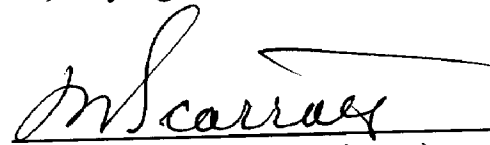
STATEMENT BY WITNESS

I, MARY SCARROTT, whose full Post Office
(Name of Witness)

address is 2426 Lombard Ave, Burlington, Ont L7P3G2
(Address of Witness)

hereby declare that I was personally present and did see the above named person, personally known to me to be the person named in the assignment, duly sign and execute the same.

Date: Sept 14 01



(Signature of Witness)