08-02-2001 RE EET U.S. DEPARTMENT OF COMMERCE FORM PTO-1595 (Substitute) Patent and Trademark Office 101797069 To the Honorable Commissioner of Patents: Please record the attached organial documents or copy thereof. Name of conveying party(ies): 2. Name and address of receiving party(ies): 7-160) Marcos N. Novaes Name: IBM Corporation Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No Nature of conveyance: Address: __ ☐ Merger ☐ Security Agreement ☐ Change of Name ☐ Other_____ City: Armonk State: NY Zip: 10504 Execution Date: 16 July 2001 Additional name(s) & address(es) attached? ☐ Yes ⋈ No 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: 16 July 2001 A. Patent Application No(s). B. Patent No(s). Additional numbers attached? ☐ Yes ☒ No 6. Total number of applications and Name and address of party to whom correspondence concerning document should be mailed: patents involved: \$ 40.00 7. Total fee (37 CFR 3.41): Name: Stanley D. Ference III ☐ Enclosed Authorized to be charged to deposit account FERENCE & ASSOCIATES Charge any deficiency to deposit account 8. Deposit account number: Address: 129 Oakhurst Road 50-0510 (Attach duplicate copy of this page if paying by deposit City: Pittsburgh State: PA Zip: 15215 account) DO NOT USE THIS SPACE 00000093 500510 09906938 08/01/2001 TDIAZ1 40.00 CH 01 FC:581

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

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Stanley D. Ference III

Name of Person Signing

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Signature

16 July 2001

Assignment

Whereas, I

INVENTOR

Marcos N. Novaes

AND CITY

County of Dutchess

of Hopewell Junction,

and State of New York

have invented certain improvements in

TITLE

METHODS AND ARRANGEMENTS FOR MULTICASTING A DATA STREAM AT

DIFFERENT DATA RATES TO GROUPS OF SUBSCRIBERS

executed, respectively, a United States patent application therefor on even date herewith.

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504, (hereinafter called IBM), desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, I, the above named, hereby sell, assign, and transfer to IBM, its successors and assigns, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of said United States application, and I request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said applications to IBM, its successors and assigns; and I hereby agree that IBM may apply for foreign Letters Patent on said invention and I will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

Signed and sealed

CITY AND

DATE

at Hawthorne

RECORDED: 07/16/2001

,2001

/ Knovaes)

(Marcos N. FIRST NAME MIDDLE INITIAL LAS

LAST NAME

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