Form PTO 1595 (Rev. 6-93) 08 - 01 - 20	_I1 OLIEE1
OMB No. 0651-0011 (exp. 4/94)	Patent and Trademark Office 6727/OH1846727/OH1848
To the Honorable Commissions 1014204	SIRIP FIN 2811 IBE:
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
Dan CHAZAN, Meir ZIBULSKI and Ron HOORY	7.758
Additional name(s) of conveying party(ies) attached? [] Yes [X] No	Name: International Business Machines Corporation
3. Nature of conveyance:	Street Address: New Orchard Road
	City: Armonk State: New York Zip: 10504
[X] Assignment [] Merger [] Security Agreement [] Change of Name	Additional name(s) & address(es) attached? [] Yes [X] No
Execution Date: June 28, 2000 : Tune 28, 2000 ;	
2 M D 4 5815,000	
4. Application number(s) or patent number(s):	
If this document is being filed together with a new app 2000	lication, the execution date of the application is: <u>June 28,</u>
A. Patent Application No.(s)	EXPRESS MAIL CERTIFICATE 6 2 8 2 2 1 4 8 I hereby certify that, on the date indicated above 1 deposited this paper or fee with the U.S. Postal Service & that it was addressed for delivery to the Commissioner B. Patent No. (soft Patents & Trademarks, Washington, D.C. 2023) by Express Mail Post Office to Addresses service.
DG UI) 587 Additional numbers att	Name (Print) Signature
5. Name and address of party to whom correspondence concerning document should be mailed:	Total number of applications and patents involved: 1
Name: Darby & Darby P.C.	
Internal Address: S. Peter Ludwig, Esq.	7. Total fee (37 CFR 3.41):\$ 40.00
Street Address: <u>805 Third Avenue, 27th Floor</u>	[X] Enclosed
	[] Authorized to be charged to deposit account
City: New York State: New York Zip: 10022-7513	8. Deposit account number:
	<u>04-0100</u>
	(Attach duplicate copy of this page if paying by deposit account)
DO NOT US	SE THIS SPACE
DO NOT OS	E INIS SPACE
9. Statement and signature. To the best of my knowledge and belief, the foregoing true copy of the original document.	information is true and correct and any attached copy is a
Walt Thomas Zielinski #18,902 Name of Person Signing Signature	July 14, 2000

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

77/25/2000 WILLARI 00000026 0961756 humber of pages including cover sheet, attachments, and document:

Date

ASSIGNMENT

WHEREAS, the below named inventors, ASSIGNORS, have made a certain new and useful invention in:

FAST FREQUENCY-DOMAIN PITCH ESTIMATION

for which the patent application specification is attached hereto and which is being executed concurrently herewith,

and WHEREAS, INTERNATIONAL BUSINESS MACHINES CORPORATION, a U.S. company having a place of business at New Orchard Road, Armonk, New York, NY 10504, U.S.A., ASSIGNEE, is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof, and applications for industrial property protection, including, without limitation, all applications for patents, utility models and designs which may hereafter be filed for said invention any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other International agreement or the domestic laws of the country in which any such application is filed, and all may be applicable; forms of industrial property protection, including, without limitation, patents, models, inventor's certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof.

ASSIGNORS authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND ASSIGNORS covenant and agree that they have full right to convey the entire interest herein assigned, and have not executed, and will not execute, any agreement in conflict herewith.

AND ASSIGNORS further covenant and agree that they will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

Full name of first inventor: Dan Chazan
Inventor's signature De Mate 28/6/00
Residence: Haifa, Israel Citizenship: Israel Post Office address: 64 Shvedia Street, Haifa 34980, Israel
Full name of second joint inventor: Meir Zibulski
Inventor's signature
Residence: Haifa, Israel Citizenship: Israel Post Office Address: 23 Shaar Hagai Street, Haifa 34554, Israel
Full name of third joint inventor: Ron Hoory Inventor's signature Date Date
Residence: Haifa, Israel

Post Office Address: 27 Keren Hayesod Street, Haifa 34970, Israel

Citizenship: Israel