

PATENT ASSIGNMENT RECORDATION COVER SHEET
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Electronic Version: v08

Stylesheet Version: 3.0.0

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT OF ASSIGNOR'S INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
Mukta G. Farooq	09/09/2004
Charles C. Goldsmith	09/13/2004
RECEIVING PARTY DATA	
Name:	International Business Machines Corporation
Street Address:	New Orchard Road
City:	Armonk
State:	NEW YORK
Postal Code:	10504
CORRESPONDENCE DATA SERIAL NUMBER: 10/711461	
Fax Number:	8458926363
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
CUSTOMER NUMBER:	029505
When the customer number has been provided, the Office of Public Records will obtain the correspondence data from the official record on file at the USPTO.	
Phone:	8458942580
NAME OF PERSON SIGNING:	Joseph P. Abate
eSIGNATURE:	/Joseph P. Abate, Reg. No 30,238 s /
DATE SIGNED:	09/17/2004
Total Attachments: 2 source=F9040001ass1.tif source=F9040001ass2.tif	

PATENT

Acknowledgement Receipt

**UNITED STATES PATENT AND TRADEMARK OFFICE
ACKNOWLEDGEMENT RECEIPT**

Electronic Version 1.1
Stylesheet Version v1.1.1

Title of Invention	STRUCTURE AND METHOD TO GAIN SUBSTANTIAL RELIABILITY IMPROVEMENTS IN LEAD-FREE BGAs ASSEMBLED WITH LEAD-BEARING SOLDERS
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Submission Type: Utility Patent Filing
Application Number: 10/711461
EFS ID: 68817
Server Response:

10/711461

Confirmation Code	Message
ISVR1	Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application
ICON1	5460
USPTOEFSNotice	For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/
IGEN77	Filename= N/A BusinessRule= The access code is not included which allows for automated processing of fees from the deposit account. #Supporting Msg:Either <us-access-code> not found in fee-xml OR actual access code not provided in the function call.

First Named Applicant: Mukta Farooq
Attorney Docket Number: FIS920040001US1
Timestamp: 2004-09-20 15:02:17 EDT
From: us

File Listing:

Doc. Name	File Name	Size (Bytes)
us-ids	FIS920040001US1-usidst.xml	1299
us-ids	us-ids.dtd	7763
us-ids	us-ids.xsl	12026
us-assignment	FIS920040001US1-usassn.xml	1937
us-assignment	us-assignment.xsl	11263
us-assignment	us-assignment.dtd	11123
us-assignment	F9040001ass1.tif	69647
us-assignment	F9040001ass2.tif	11968
us-request	FIS920040001US1-usrequ.xml	2197
us-request	us-request.dtd	19064
us-request	us-request.xsl	33904
us-fee-sheet	FIS920040001US1-usfees.xml	1977
us-fee-sheet	us-fee-sheet.xsl	24912
us-fee-sheet	us-fee-sheet.dtd	11069

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us-declaration	F9040001dec3.tif	9800
application-body	FIS920040001US1-APP.xml	30629
application-body	application-body.dtd	49498
application-body	image1.tif	187411
application-body	image2.tif	810169
application-body	image3.tif	810169
application-body	isoamsa.ent	5191
application-body	isoamsb.ent	3988
application-body	isoamsc.ent	1460
application-body	isoamsn.ent	5620
application-body	isoamsr.ent	1934
application-body	isobox.ent	7073
application-body	isocyr1.ent	3568
application-body	isocyr2.ent	5345
application-body	isodia.ent	2504
application-body	isogr1.ent	1508
application-body	isogr2.ent	4030
application-body	isogr3.ent	2259
application-body	isogr4.ent	3559
application-body	isolat1.ent	1920
application-body	isolat2.ent	5282
application-body	isomfrk.ent	9007
application-body	isomopf.ent	4553
application-body	isomscr.ent	2571
application-body	isonum.ent	4628
application-body	isopub.ent	5913
application-body	isotech.ent	6621
application-body	mathml2.dtd	5268
application-body	mathml2-qname-1.mod	54588
application-body	rmmialias.ent	13225
application-body	rmmlextra.ent	38209
application-body	soextblx.dtd	7901
application-body	us-application-body.xsl	12870
application-body	wipo.ent	82504
application-body-pdf-wrap	FIS920040001US1-APP-pdf-wrap.xml	4956
abstract-pdf	FIS920040001US1-APP-abst.pdf	781
claims-pdf	FIS920040001US1-APP-clms.pdf	15341
description-pdf	FIS920040001US1-APP-desc.pdf	25597
drawings-pdf	FIS920040001US1-APP-draw.pdf	60185
us-declaration	F9040001dec1.tif	24555
us-declaration	F9040001dec2.tif	37313
package-data	FIS920040001US1-pkda.xml	43161
package-data	package-data.dtd	10227
package-data	us-package-data.xsl	27025
		19263
	Total files size	2689328

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REEL: 015332 FRAME: 0401

PATENT ASSIGNMENT FORM

For and in consideration of good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor acknowledges his/her prior and ongoing obligation to sell, assign, and transfer, and agrees to sell, assign, and transfer the entire world wide right, title and interest for the United States and all foreign countries, in and to any and all inventions and improvements conceived during and within the scope of his/her employment, and further acknowledges that he/she has sold, assigned, and transferred, and hereby sells, assigns, and transfers, unto:

**INTERNATIONAL BUSINESS MACHINES CORPORATION ("IBM"),
Armonk, New York 10504**

a corporation of New York, and IBM desires to acquire all right, title, and interest, in and to the certain inventions (identified below), applications, and any United States and foreign patents to be obtained therefore relating to:

Title of Invention for **STRUCTURE AND METHOD TO GAIN SUBSTANTIAL RELIABILITY
IMPROVEMENTS IN LEAD-FREE BGAs ASSEMBLED WITH LEAD-BEARING SOLDERS**

United States Patent

as set forth in United States Patent Application executed by each undersigned inventor on the date indicated by each inventor signature below, and further identified by **Attorney Docket Number FIS920040001US1**;
(select one): executed concurrently herewith or Serial No. _____ Filed on _____

for and to said United States Patent Application including any and all divisions or continuations thereof and in and to any and all Letters Patent of the United States and foreign patents and all rights of priority to be obtained therefore which may issue on any such application or for said invention therein disclosed, including any and all reissues or extensions thereof, to be held and enjoyed by, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made;

Each undersigned inventor hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all such Letters Patent to IBM, its successors and assigns, in accordance herewith;

Each undersigned inventor warrants and covenants that he/she has the full and unencumbered right to sell and assign the interests hereby sold and assigned and that he/she has not executed and will not execute any document or instrument in conflict herewith;

Each undersigned inventor further covenants and agrees that he/she, upon the request and at the expense of the IBM, will execute and deliver any papers, make all rightful oaths, testify in any legal proceeding relating to said inventions and improvements, communicate to the IBM all facts known to the undersigned relating to such inventions and improvements and the history thereof; and perform all other lawful acts deemed necessary or desirable by IBM, and its legal representatives, to secure, maintain, and enforce patent protection for such inventions and improvements and for vesting title to such inventions and improvements in the IBM, and in particular to perfect title to said above-identified certain inventions, and applications including divisions and continuations thereof, and any and all Letters Patent which may be granted therefore or thereon, including reissues, extensions, or counterparts;

Each undersigned inventor hereby grants the IBM and the firm of the power to insert in this Assignment any further identification which may be necessary or desirable for recordation of this Assignment.

This assignment is governed by the substantive laws of the state of New York.

Executed by Inventor 1 of 2

Signature: Mukta G. Farooq Date: 09-09-04
Mukta G. Farooq

Executed by Inventor 2 of 2

Signature: Charles C. Goldsmith Date: 9/13/04
Charles C. Goldsmith

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