FORM PTO-1594 1-31-92	RECO)-30-1998	T	U.S. DEPA OF COMN	
Atty Docket #:				Patent an	d
FD98018	10	00863609		Tradema	k Office
	issioner of Patents and Trademarks: דיו	ease record the attached original			
1. Name of convey	ing part(ies):	2. Name and address	of receiving	party(ies):	_
Curtis D. Moyer					PTC
Peter A. Smith		Name: <u>Motorola, Inc.</u>			
Robert H. Reuss					J. S.
Troy A. Trottier					12
Steven A. Voight		Internal Address:	<u>Intellectual</u>	Property D	ept⊮ ⊂
attached sheet.	nveying party(ies) is provided on				
Nature of convey	vance:	******	T. W.M.		
Assignment Merger		Street Address: 13	03 East Alg	<u>gonquin Roa</u>	ad
Security Agree	ment				
Other		City: <u>Schaumbu</u>	<u>rg</u> State:	<u>IL</u> ZI	P: <u>6019</u>
Execution date of conveyance:	September 28, 1998 and October 15, 1998	Additional name(s) & addres	s(es) attached?	Yes	⊠ N
	ng filed together with a new applica	tion, the execution date of the B. Patent No.(s):	Sep	otember 28, 19 October 15, 19	
If this document is beir application is: A. Patent Applicat	ng filed together with a new application No.(s): Imber: FD98018	tion, the execution date of the	Sep		
If this document is beir application is: A. Patent Applicat Attorney Docket Nu 5. Name and addres	ng filed together with a new application No.(s): Imber: FD98018 Additional	B. Patent No.(s):	Yes	October 15, 19	998
If this document is beir application is: A. Patent Applicat Attorney Docket Nu 5. Name and addres correspondence conce	ng filed together with a new application No.(s): Imber: FD98018 Additional is of party to whom	B. Patent No.(s): numbers attached?	Yes lications and p	October 15, 19 No Patents involv	998 ed: 1
If this document is beir application is: A. Patent Applicat Attorney Docket Nu 5. Name and addres correspondence concernations:	ng filed together with a new application No.(s): Imber: FD98018 Additional of party to whom erning document should be	B. Patent No.(s): numbers attached?	Yes lications and p	October 15, 19 No Patents involv	998 ed: 1
If this document is beir application is: A. Patent Applicat Attorney Docket Nu 5. Name and addres correspondence concernailed: Name:	ng filed together with a new application No.(s): Imber: FD98018 Additional sof party to whom erning document should be Motorola, Inc. Intellectual Property Dept.	B. Patent No.(s): numbers attached? 6. Total number of app. 7. Total fee (37 CFR 3.4	Yes lications and p	October 15, 19 No Datents involv	998 ed: 1
If this document is beir application is: A. Patent Applicat Attorney Docket Nu 5. Name and address correspondence concernailed: Name: Internal Address:	ng filed together with a new application No.(s): Imber: FD98018 Additional soft party to whom erning document should be Motorola, Inc. Intellectual Property Dept. Suite R3108 P.O. Box 10219 City: Scottsdale State: AZ	B. Patent No.(s): numbers attached? 6. Total number of app. 7. Total fee (37 CFR 3.4 Enclosed Authorized to be ch. 8. Deposit account number.	Yes lications and p 1)	October 15, 19 No Patents involv	ed: 1
If this document is beir application is: A. Patent Applicat Attorney Docket Nu 5. Name and address correspondence concernailed: Name: Internal Address:	ng filed together with a new application No.(s): Imber: FD98018 Additional Section of party to whom erning document should be Motorola, Inc. Intellectual Property Dept. Suite R3108 P.O. Box 10219 City: Scottsdale State: AZ ZIP: 85271-0219	B. Patent No.(s): numbers attached? 6. Total number of app. 7. Total fee (37 CFR 3.4 Enclosed Authorized to be ch	Yes lications and p 1)	October 15, 19 No Patents involv	ed: 1
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If this document is beir application is: A. Patent Applicat Attorney Docket Nu 5. Name and address correspondence concemailed: Name: Internal Address: Street Address: 9. Statement and sign To the best of my known the origin of the origin of the original statement. S. Kevin Pickens	Additional soft party to whom erning document should be Motorola, Inc. Intellectual Property Dept. Suite R3108 P.O. Box 10219 City: Scottsdale State: AZ ZIP: 85271-0219 DO NO	B. Patent No.(s): numbers attached? 6. Total number of app. 7. Total fee (37 CFR 3.4 Enclosed Authorized to be ch. 8. Deposit account numl. (Attach triplicate copy of t.) OT USE THIS SPACE S. K. C.	Yes lications and p 1) arged to deposite to d	No No patents involved account	ed: 1\$ 40.0 count)
If this document is beir application is: A. Patent Applicat Attorney Docket Nu 5. Name and address correspondence concemailed: Name: Internal Address: Street Address: 9. Statement and sign To the best of my known the copy of the orign S. Kevin Pickens Name of Person Signing	Additional soft party to whom erning document should be Motorola, Inc. Intellectual Property Dept. Suite R3108 P.O. Box 10219 City: Scottsdale State: AZ ZIP: 85271-0219 DO NO	B. Patent No.(s): numbers attached? 6. Total number of app. 7. Total fee (37 CFR 3.4 Enclosed Authorized to be ch. 8. Deposit account numl. (Attach triplicate copy of t.) T USE THIS SPACE Signature	Yes lications and p 1) arged to deposit oer: 13-4771 his page if payir	No No Patents involv t account any attached co Date	ed: 1\$ 40.0 count)

FORM PTO-1594 PAGE 2

Names of conveying parties (cont.):

Diane A. Carrillo Kevin J. Nordquist Jaynal A. Molla David W. Jacobs Kathleen A. Tobin

ASSIGNMENT AND AGREEMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, we, Curtis D. Moyer of Phoenix, AZ; Peter A. Smith of Chandler, AZ; Robert H. Reuss of Fountain Hills, AZ; Troy A. Trottier of Mesa, AZ; Steven A. Voight of Gilbert, AZ; Diane A. Carrillo of Phoenix, AZ; Kevin J. Nordquist of Higley, AZ; Jaynal A. Molla of Gilbert, AZ; David W. Jacobs of Higley, AZ; Kathleen A. Tobin of San Antonio, TX, have sold, assigned and transferred, and do hereby sell, assign and transfer unto MOTOROLA, INC., a corporation of the State of Delaware, having its principal office in Schaumburg, State of Illinois, United States of America, and its successors, assigns, and legal representatives, the entire right, title and interest for the United States of America in and to certain inventions relating to improvements in FIELD EMISSION DEVICE HAVING A VACUUM BRIDGE FOCUSING STRUCTURE AND METHOD (Attorney Docket No. FD98018), described, illustrated and claimed in an application for Letters Patent of the United States of America executed by us, together with the entire right, title and interest in and to said application, and in and to Letters Patent which may be issued upon said application, and upon any division, extension, continuation, or reissue thereof.

We hereby also sell, assign and transfer unto MOTOROLA, INC., the entire right, title and interest in and to said invention and in and to applications for Letters Patent therefor in all countries foreign to the United States of America, including all rights under any and all international conventions and treaties in respect of said inventions and said applications for Letters Patent in foreign countries, and we further authorize MOTOROLA, INC. to apply for Letters Patent in foreign countries directly in its own name, and to claim the priority of the filing date of the application for Letters Patent of the United States of America under the provisions of any and all international conventions and treaties.

We hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America to issue Letters Patent upon the aforesaid application, division, extension, continuation or reissue, to MOTOROLA, INC., for the sole use and behoof of MOTOROLA, INC., its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted, the same as they would have been held and enjoyed by us had this assignment not been made, and we hereby authorize and request the equivalent authorities in foreign countries to issue the patents of their respective countries to MOTOROLA, INC.

We agree that, when requested, we will, without charge to MOTOROLA, INC., but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in MOTOROLA, INC., its successors, assigns and legal representatives or nominees.

We covenant with MOTOROLA, INC., its successors, assigns and legal representatives, that the interest and property hereby conveyed is free from all prior assignment, grant, mortgage, license or other encumbrance.

STATE OF ARIZONA COUNTY OF MARICOPA _____, a Notary Public in and for the County and State aforesaid, do hereby certify that Curtis D. Moyer, whose name(s) are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he/she signed, sealed and delivered the instrument as his/her free and voluntary act and deed for the uses and purposes therein set forth. Given under my hand and notarial seal this 15 th day of October 1998. My commission expires on Oct. Notary Public - State of Arizona

MARICOPA COUNTY My Comm. Expires Oct. 11, 2002

Address correspondence concerning this document to: Motorola, Inc., Intellectual Property Department -IL01/3rd Floor, 1303 E. Algonquin Road, Schaumburg, IL 60196.

STATE OF ARIZONA COUNTY OF MARICOPA Evelyn & Coghlan a Notary Public in and for the County and State aforesaid, do hereby certify that Peter A. Smith, whose name(s) are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he/she signed, sealed and delivered the instrument as his/her free and voluntary act and deed for the uses and purposes therein set forth, Given under my hand and notarial seal this 15th day of October 1998. My commission expires on Oat. 11, 2002 OFFICIAL SEA EVELYN E. COGHLAN Notary Public - State of Arizona MARICOPA COUNTY My Comm. Expires Oct. 11, 2002

Address correspondence concerning this document to: Motorola, Inc., Intellectual Property Department -IL01/3rd Floor, 1303 E. Algonquin Road, Schaumburg, IL 60196.

JOINT FD98018

Red Pew

STATE OF ARIZONA

COUNTY OF MARICOPA

Given under my hand and notarial seal this 15th day of October

1998.

nathon 3 mileur

My commission expires on Oct. 11, 2002

SEAL



Address correspondence concerning this document to: Motorola, Inc., Intellectual Property Department -IL01/3rd Floor, 1303 E. Algonquin Road, Schaumburg, IL 60196.

JOINT ED98018

Troy A. Trottier

STATE OF ARIZONA

COUNTY OF MARICOPA

I, Couche County and State aforesaid, do hereby certify that Troy A. Trottier, whose name(s) are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he/she signed, sealed and delivered the instrument as his/her free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and notarial seal this _____ day of ____ October

1998.

College Cognian

My commission expires on Od. 11, 2005

SEAL



Address correspondence concerning this document to: Motorola, Inc., Intellectual Property Department -IL01/3rd Floor, 1303 E. Algonquin Road, Schaumburg, IL 60196.

PATENT

REEL: 9550 FRAME: 0931

STATE OF ARIZONA COUNTY OF MARICOPA

I, Cocker to Contain, a Notary Public in and for the County and State aforesaid, do hereby certify that Steven A. Voight, whose name(s) are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he/she signed, sealed and delivered the instrument as his/her free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and notarial seal this 15th day of October

1998.

Earlyn & Caplan My commission expires on Oct. 11, 2002



Address correspondence concerning this document to: Motorola, Inc., Intellectual Property Department -IL01/3rd Floor, 1303 E. Algonquin Road, Schaumburg, IL 60196.

PATENT

JOINT FD98018

Diane a. Carrillo

STATE OF ARIZONA)
	:
COUNTY OF MARICOPA)
I, Eastyn & Ca	, a Notary Public in and for the hereby certify that Diane A. Carrillo, whose name(s) are
County and State aforesaid, do	o Rereby certify that Diane A. Carrillo, whose name(s) are
subscribed to the foregoing in	nstrument, appeared before me this day in person and
acknowledged that he/she sign	gned, sealed and delivered the instrument as his/her free
and voluntary act and deed for	or the uses and purposes therein set forth. and notarial seal this LStn day of Octobe?
	and notarial seal this <u>15th</u> day of <u>Octobe</u> ?
1998.	
	Euslin & Caplan
	My commission expires on Oct. 11, 2002



Address correspondence concerning this document to: Motorola, Inc., Intellectual Property Department -IL01/3rd Floor, 1303 E. Algonquin Road, Schaumburg, IL 60196.

Kevin J. Wordquist

STATE OF ARIZONA

COUNTY OF MARICOPA

1, Evelyn & Conton

a Notary Pt

I, Couch County and State aforesaid, do hereby certify that Kevin J. Nordquist, whose name(s) are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he/she signed, sealed and delivered the instrument as his/her free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and notarial seal this 15th day of October

My commission expires on Oct 11, 2002



1998.

Address correspondence concerning this document to: Motorola, Inc., Intellectual Property Department -IL01/3rd Floor, 1303 E. Algonquin Road, Schaumburg, IL 60196.

Jaynal A. Molla

STATE OF ARIZONA COUNTY OF MARICOPA _____, a Notary Public in and for the County and State aforesaid, do hereby certify that Jaynal A. Molla, whose name(s) are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he/she signed, sealed and delivered the instrument as his/her free and voluntary act and deed for the uses and purposes therein set forth. Given under my hand and notarial seal this 15th day of Oatober 1998. My commission expires on ______ OFFICIAL SEAL EVELYN E. COGHLAN Notary Public - State of Arizona MARICOPA COUNTY My Comm. Expires Oct. 11, 2002

Address correspondence concerning this document to: Motorola, Inc., Intellectual Property Department -IL01/3rd Floor, 1303 E. Algonquin Road, Schaumburg, IL 60196.

STATE OF ARIZONA COUNTY OF MARICOPA ____, a Notary Public in and for the County and State aforesaid, do hereby certify that David W. Jacobs, whose name(s) are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he/she signed, sealed and delivered the instrument as his/her free and voluntary act and deed for the uses and purposes therein set forth. Given under my hand and notarial seal this 15th day of October 1998. My commission expires on

SEAL OFFICIAL SEAL EVELYN E. COGHLAN Notary Public - State of Arizona MARICOPA COUNTY My Comm. Expires Oct. 11, 2002

Address correspondence concerning this document to: Motorola, Inc., Intellectual Property Department -IL01/3rd Floor, 1303 E. Algonquin Road, Schaumburg, IL 60196.

Kathleen A. Tobin

STATE OF TEXAS

COUNTY OF BUKAY

I, ARY RADO, a Notary Public in and for the County and State aforesaid, do hereby certify that Kathleen A. Tobin, whose name(s) are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he/she signed, sealed and delivered the instrument as his/her free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and notarial seal this 28 day of September,

MARY R. ALFARO

MARY R. ALFARO

1998.

MARY R. ALFARO
Notary Public
State of Texas
Comm. exp. 06-14-99

My commission expires on

SEAL

Address correspondence concerning this document to: Motorola, Inc., Intellectual Property Department -IL01/3rd Floor, 1303 E. Algonquin Road, Schaumburg, IL 60196.

PATENT REEL: 9550 FRAME: 0937

RECORDED: 10/21/1998