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April 2, 1999

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Mr. James Burtle, Acting Chief
Experimental Licensing Branch
Federal Communications Commission
2000 M Street, N.W. (Mail Stop 1300E1)
Washington, D.C. 20554

Re: Motorola, Inc.
Amendment to Application for Experimental License
File Nos. 5677-EX-PL-97 and 5728-EX-PL-97

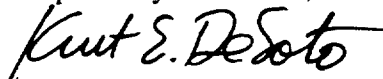
On behalf of Motorola, Inc., electronically transmitted herewith is an amendment to the above-referenced applications. This amendment also responds to an FCC inquiry regarding this matter. See Letter from Anthony N. Serafini, Engineer, Office of Engineering and Technology, FCC, to Kurt E. DeSoto, Wiley, Rein & Fielding (March 3, 1999).

Specifically, attached is a revised FCC Form 442 and attachment to an application filed March 7, 1997, and amended April 28, 1997. See File No. 5677-EX-PL-97. These materials are intended to supersede and replace the Form and attachment currently on file at the FCC.

By this amendment, Motorola seeks to: (1) consolidate the above-referenced applications currently pending at the FCC; (2) update the list of frequencies requested to accommodate additional experimental efforts; (3) withdraw its request for confidentiality; and (4) clarify the scope of the proposed experimentation.

Should you have any questions regarding this amendment or the underlying applications, please call me at (202) 719-7235. In my absence, please call David E. Hilliard or Thomas Dombrowsky at (202) 719-7000.

Respectfully submitted,



Kurt E. DeSoto
Counsel for Motorola, Inc.

cc: Anthony Serafini, FCC

APPLICATION FOR NEW OR MODIFIED RADIO STATION AUTHORIZATION UNDER PART 5
OF FCC RULES - EXPERIMENTAL RADIO SERVICE (OTHER THAN BROADCAST)

1. Applicant's Name and Post Office address (Street address, city, state, and ZIP Code. See Instruction No. 4) MOTOROLA CELLULAR INFRASTRUCTURE GROUP 1501 WEST SHURE DRIVE, ROOM E140 ARLINGTON HEIGHTS, ILLINOIS 60004	DO NOT WRITE IN THIS BLOCK File No. 5728-EX-PL-97
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2(a). Application for (check only one box)

☒ New station ☐ Modification of existing authorization

2(b). For Modification indicate below:

File No: Call Sign:

3. Application for Modification: Check the box beside all particulars to be modified. Check either addition or replacement to indicate whether the change is an addition or a replacement of parameters in the current authorization.

☐ FREQUENCY - ☐ EMISSION - ☐ POWER - ☐ LOCATION -
☐ addition or ☐ replacement? ☐ addition or ☐ replacement? ☐ addition or ☐ replacement? ☐ addition or ☐ replacement?

☐ OTHER PARTICULARS - addition or replacement? (Describe below or in attached EXHIBIT No. _____)

4. Particulars of Operation (see instruction below)

Frequency (state whether kHz or MHz)	POWER			EMISSION	MODULATING SIGNAL	NECESSARY BANDWIDTH (kHz)
(A)	(B)	(C)	(D)	(E)	(F)	(G)
Beg: 1850MHz		40 Watts		1M25FXW	QPSK	1250 kHz
End: 1990MHz					CDMA	

(A) List each frequency or frequency band separately. (If more space is required, attach as EXHIBIT No. _____)

(B) Insert maximum R.F. output power at the transmitter terminals. Specify units.

(C) Insert maximum effective radiated power from the antenna (If pulsed emission, specify peak power). Specify units.

(D) Insert "MEAN" or "PEAK" (See definitions in Part 5).

(E) List each type of emission separately for each frequency. (See Section 2.201 of FCC Rules.)

(F) Insert as appropriate for the type of modulation:

- (1) the maximum speed of keying in bauds;
- (2) maximum audio modulating frequency;
- (3) frequency deviation of carrier;
- (4) pulse duration and repetition rate.

For complex emissions, describe in detail in the space provided below.

(G) Describe how the necessary bandwidth was determined in space provided below.

CDMA operation as defined in TIA IS/95 and ANSI-J-STD-008, is specified for 1.228 MHz bandwidth. 1250 kHz includes 22 kHz guard band.

5(a). Proposed location of transmitter and transmitting antenna (check only one box to indicate type of operation):

☒ FIXED/BASE

☐ MOBILE

☐ BASE AND MOBILE

5(b). If permanently located at a FIXED location, give below:

State _____ County _____ City or Town _____

Number and street (or other indication of location)

Within the Continental United States, Alaska, Hawaii, and Possessions.

5(c). If mobile, describe the exact area of operation

5(b)(1). Enter geographical coordinates exact to the nearest second (see instruction 10)

North Latitude (DD-MM-SS)

0 " "

West Longitude (DD-MM-SS)

0 " "

5(c)(1) Enter geographical coordinates of the approximate center of mobile operation (see instruction 10)

North Latitude

0 " "

West Longitude

0 " "

5(d). Datum (see instruction 10): ☐ NAD 27 ☐ NAD 83

6. Is a directional antenna (other than radar) used? ☒ YES ☐ NO

If "YES", give the following information:

(a) Width of beam in degrees at the half-power point 120 degrees

(b) Orientation in horizontal plane _____ (c) Orientation in vertical plane YES

7. Is this authorization to be used for fulfilling the requirement of a government contract with an agency of the United States Government? ☐ YES ☒ NO

If "YES", attach as EXHIBIT No. _____ a narrative statement describing the government project, agency and contact number.

8. Is this authorization to be used for the exclusive purpose of developing radio equipment for export to be employed by stations under the jurisdiction of a foreign government? ☐ YES ☒ NO

If "YES", attach as EXHIBIT No. _____ the following information: Provide the contract number and the name of the foreign government concerned.

9. Is this authorization to be used for providing communications essential to a research project? (The radio communication is not the objective of the research project). ☐ YES ☒ NO

If "YES", attach as EXHIBIT No. _____ a narrative statement providing the following information:

(a) A description of the nature of the research project being conducted.

(b) A showing that the communications facilities requested are necessary for the research project involved.

(c) A showing that existing communications facilities are inadequate.

10. If all the answers to Items 7, 8, and 9, are "NO", attach as EXHIBIT No. _____ a narrative statement describing in detail the following:

(a) The complete program of research and experimentation proposed including description of equipment and theory of operation.

(b) The specific objectives sought to be accomplished.

(c) How the program of experimentation has a reasonable promise of contribution to the development, extension, expansion, or utilization of the radio art, or is along line not already investigated.

11(a). Give an estimate of the length of time that will be required to complete the program of experimentation proposed in this application: At least 2 years

(b) If less than 2 years, give the length of time in months that the authorization requested in this application will be required: _____

12. Would a Commission grant of this application come within Section 11807 of the FCC Rules, such that it may have a significant environmental impact (see instruction 11)? ☐ YES ☒ NO

If "YES", attach as EXHIBIT No. _____ an Environmental Assessment as required by Section 11811.

13. List below transmitting equipment to be installed (if experimental, so state):

MANUFACTURER	MODEL NUMBER	NO. OF UNITS
MOTOROLA INC	SC ⁽¹⁾ 4852	10
	SC ⁽¹⁾ 4852E	10

12. Is the equipment listed in Item 13 capable of station identification pursuant to Section 5.152? ☐ YES ☒ NO

13. Will the antenna extend more than 6 meters above the ground, or if mounted on an existing building, will it extend more than 6 meters above the building, or will the proposed antenna be mounted on an existing structure other than a building? ☒ YES ☐ NO

If "YES", give the following (see instruction 9):

(a) Overall height above ground to tip of antenna is _____ meters.

(b) Elevation of ground at antenna site above mean sea level is _____ meters.

(c) Distance to nearest aircraft landing area is _____ kilometers.

(d) List any natural formations of existing man-made structures (hills, trees, water tanks, towers, etc.) which, in the opinion of the applicant, would tend to shield the antenna from aircraft and thereby minimize the aeronautical hazard of the antenna.

Antenna heights above ground and ground elevation above sea level will vary by location.

(e) Submit as EXHIBIT No. _____ a vertical profile sketch of total structure including supporting building, if any, giving heights in meters above ground for all significant features. Clearly indicate existing portion, noting particulars of aviation obstruction lighting already available.

13. Applicant is (Check only one box)

☐ INDIVIDUAL ☐ ASSOCIATION ☐ PARTNERSHIP ☒ CORPORATION

☐ OTHER (describe in space provided below)

17. Is applicant a foreign government or a representative of a foreign government? ☐ YES ☒ NO

15. Has applicant or any party to this application had any FCC station license or permit revoked or had any application for permit, license or renewal denied by this Commission? ☐ YES ☒ NO

If "YES", attach as EXHIBIT No. _____ a statement giving call sign of license or permit revoked and relate circumstances.

15. Will applicant be owner and operator of the station? ☒ YES ☐ NO

14. Give name, title, and telephone number (include area code), and Internet e-mail address (if applicable) of person who can best handle inquiries pertaining to this application.

SITAL DAIYA - FCC COORDINATOR (847) 632-6343

21. APPLICANT ANTI-DRUG ABUSE CERTIFICATION:

By checking "YES", the individual applicant certifies that he or she is eligible for this license. This requires that he or she is not subject to a denial of federal benefits, including FCC benefits, as a result of a drug offense conviction pursuant to Section 5801 of the Anti- Drug Abuse Act of 1988, 21 U.S.C. 882. A non- individual applicant, e.g., corporation, partnership or other unincorporated association, certifies that no party to the application is subject to a denial of federal benefits, pursuant to that section. For definition of a "party" for these purposes, see 47 CFR 1.2002(b).

☒ YES ☐ NO

22. List below all exhibits in numerical sequence and the item number of form requiring the exhibit identified.

EXHIBIT NUMBER	ITEM NO. OF FORM	EXHIBIT NUMBER	ITEM NO. OF FORM	EXHIBIT NUMBER	ITEM NO. OF FORM
1	10				

23 CERTIFICATION:

Attention: Read this certification carefully before signing this application.

THE APPLICANT CERTIFIES THAT:

- (a) Copies of FCC Rule Parts 2 and 5 are on hand; and
- (b) Adequate financial appropriations have been made to carry on the program of experimentation which will be conducted by qualified personnel; and
- (c) All operations will be on an experimental basis in accordance with Part 5 and other applicable rules, and will be conducted in such a manner and at such a time as to preclude harmful interference to any authorized station; and
- (d) Grant of the authorization requested herein will not be construed as a finding on the part of the Commission:
 - (1) that the frequencies and other technical parameters specified in the authorization are the best suited for the proposed program of experimentation, and
 - (2) that the applicant will be authorized to operate on any basis other than experimental, and
 - (3) that the Commission is obligated by the results of the experimental program to make provision in its rules including its table of frequency allocations for applicant's type of operation on a regularly licensed basis.

APPLICANT CERTIFIES FURTHER THAT:

- (e) All the statements in the application and attached exhibits are true, complete and correct to the best of the applicant's knowledge; and
- (f) The applicant is willing to finance and conduct the experimental program with full knowledge and understanding of the above limitations; and
- (g) The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the USA.

Signed and dated this 16 th day of April, 19 97

Name of Applicant MOTOROLA INC

(must correspond with name given on page 1)

By SITAL DAIYA

(print)

(signature)

Title FCC COORDINATOR

Check appropriate classification:

- ☐ Individual applicant ☐ Member of applicant partnership
- ☒ Authorized employee ☐ Office of applicant corporation or association

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, Section 312(a)(1), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

NOTIFICATION TO INDIVIDUALS UNDER PRIVACY ACT OF 1974
AND THE PAPERWORK REDUCTION ACT OF 1980

Information requested through this form is authorized by the Communications Act of 1934, as amended, and specified by Section 308 therein. The information will be used by Federal Communications Commission staff to determine eligibility for issuing authorizations in the use of the frequency spectrum and to effect the provisions of regulatory responsibilities rendered by the Commission by the Act. Information requested by this form will be available to the public unless otherwise requested pursuant to 47 CFR 0.459 of the FCC Rules and Regulations. Your response is required to obtain this authorization.

Public reporting burden for this collection of information is estimated to average four (4) hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to the Federal Communications Commission, Records Management Branch, Paperwork Reduction Project (3060-0065), Washington, DC 20554. **DO NOT send completed applications to this address.** Individuals are not required to respond to this collection unless it displays a currently valid OMB control number.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

FCC FORM 442

FOR
FCC
USE
ONLY

APPLICATION FOR NEW OR MODIFIED RADIO STATION AUTHORIZATION UNDER PART 5
OF FCC RULES - EXPERIMENTAL RADIO SERVICE (OTHER THAN BROADCAST)

SECTION I

APPLICANT NAME (Last, first, middle initial)
MOTOROLA INC

MAILING ADDRESS (Line 1) (Maximum 35 characters - refer to Instruction (2) on reverse of form)

1501 WEST SHURE DRIVE, ROOM E140

MAILING ADDRESS (Line 2) (If required) (Maximum 35 characters)

CITY

ARLINGTON HEIGHTS

STATE OR COUNTRY (If foreign address)

ILLINOIS

ZIP CODE

60004

CALL SIGN OR FILE NUMBER

Enter in Column (A) the correct Fee Type Code for the service you are applying for. Fee Type Codes may be found in FCC Fee Filing Guides. Enter in Column (B) the Fee Multiple, if applicable. Enter in Column (C) the result obtained from multiplying the value of the Fee Type Code in Column (A) by the number entered in Column (B), if any.

(A)	(B)	(C)	
FEE TYPE CODE	FEE MULTIPLE (if required)	FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY
(1) E A E		\$ 45.00	

SECTION II

— To be used only when you are requesting concurrent actions which result in a requirement to list more than one Fee Type Code.

(A)	(B)	(C)	
FEE TYPE CODE	FEE MULTIPLE (if required)	FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY
(2)		\$	
(3)		\$	
(4)		\$	
(5)		\$	

ADD ALL AMOUNTS SHOWN IN COLUMN C, LINES (1) THROUGH (5), AND ENTER THE TOTAL HERE. THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED REMITTANCE.

TOTAL AMOUNT REMITTED WITH THIS APPLICATION OR FILING
\$ 45.00

FOR FCC USE ONLY

EXHIBIT 1

Motorola Inc. is a leading manufacturer of radio-frequency (RF) devices sold in the United States and overseas. It maintains its position in the industry by continually developing new products in response to evolving consumer demand. Most recently, Motorola has been involved in the development of equipment for cellular services and personal communications services (PCS).

Motorola is now in the process of designing and testing several new generations of transmitters and transceivers to operate in the 806-849 MHz, 851-894 MHz, 896-902 MHz, 1850-1910 MHz, 1910-1930 MHz, 1930-1990 MHz, and 1990-2200 MHz bands. Such devices are subject primarily to the FCC's type acceptance procedures set forth in Section 2.983 of the agency's rules, 47 C.F.R. § 2.983 et. seq. (1996) and generally cannot be marketed or operated until FCC approval has been granted. See generally id. § 2.803. Accordingly, Motorola has in the past obtained either regular equipment authorization or special temporary authority to test and market such devices. For example, it recently requested and received authorization to evaluate several PCS prototype devices under an STA issued for call sign KF2XJE, File No. S-2539-EX-96.

Motorola believes, however, that its practice of obtaining regular approval or special temporary authority before conducting research and development for each product does not provide the needed flexibility to adapt quickly to changes in research plans and requirements. Consequently, Motorola now seeks an experimental license--subject to the non-interference and other conditions described below--to test, demonstrate, operate, and conduct limited market studies of its products prior to approval. Attached for the staff's convenience is a draft authorization prepared for this purpose.

Motorola believes the public interest, necessity, and convenience will be served by the grant of the subject application, as it would enhance the company's ability to obtain information needed to ensure its products accommodate and promote new technologies and services.

→ ? ? None
attached!

FEDERAL COMMUNICATIONS COMMISSION

Experimental Licensing Branch

2000 M Street, N.W., Suite 230

Washington, D.C. 20554

In reply refer to:

NH, Rm 264-A

MS 1300-E1

Motorola Cellular Infrastructure
Group

1501 West Shure Drive

Room E140

Arlington Heights, IL 60004

**RE: Experimental Radio Services
(Part 5 of the FCC Rules)**

Dear Mr. Daiya:

The Experimental Licensing Branch hereby acknowledges receipt of your application for experimental authority filed on FCC Form 442 received 4/28/97.

The file number assigned to your application is 5728 EX-PL-97. Please allow approximately 90 days for processing of your filing.

Thank you,

Nancy Hey

**Nancy Hey,
Information Technician
Experimental Licensing Branch**