

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

RECEIVED

MAR - 4 1996

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of:)
)
)
)
)

Amendment of Parts 2.106 and 25.202 of)
the Commission's Rules to Allocate the)
37.5-38.6 GHz Band to the)
Fixed-Satellite Service and)
to Establish Technical Rules)
for the 37.5-38.6 GHz Band.)
_____)

RM No. _____

DOCKET FILE COPY ORIGINAL

PETITION FOR RULEMAKING

Motorola Satellite Communications, Inc. ("Motorola"), hereby petitions the Commission to amend its rules, Parts 2.106 and 25.202, to allocate the 37.5-38.6 GHz band to the Fixed-Satellite Service ("FSS") (space-to-Earth) on a co-primary basis and to establish power flux density ("PFD") limits for this service.

The 37.5-38.6 GHz band already has a primary allocation to FSS downlinks. This allocation, however, has not yet been domestically implemented. On the other hand, the contiguous spectrum -- the 38.6-40.5 GHz bands -- has both a domestic and a worldwide FSS allocation.

The requested domestic implementation of the worldwide FSS allocation would be in the public interest. This spectrum, together with its adjacent bands, is vital for the accommodation

No. of Copies rec'd
List ABCDE

OET

of the next generation of broadband satellite systems. Lower bands allocated to satellite services are becoming rapidly congested, as evidenced by the numerous applications for Ka-band satellite systems now pending before the Commission. Thus, the 37.5-40 GHz bands, in conjunction with the contiguous spectrum allocated to FSS,¹¹ are the next available bands for the implementation of domestic and international satellite systems. If the 37.5-40 GHz bands are used exclusively for terrestrial services then it would be difficult, if not impossible, to implement certain types of satellite systems in this band as well as in adjacent bands.

In particular, the 37.5-38.6 GHz band, together with its contiguous spectrum, could be used for satellite systems providing high-speed broadband voice, video and data services worldwide. As the Commission is aware, such services are an essential part of the Global Information Infrastructure, and portend huge public benefits for the U.S. public as well as the world economy. Since the 37.5-38.6 GHz band is already allocated to the FSS worldwide, it offers itself for such global services. Moreover, broadband satellite applications require substantial

¹¹ As stated, the 38.6-39.5 GHz band is also allocated to FSS downlinks. Similarly, the 39.50-40.00 and 40.0-40.5 GHz bands are allocated to FSS and Mobile-Satellite Service ("MSS") downlinks domestically and worldwide. The 40.5-42.5 GHz band is allocated to the Broadcasting Satellite Service ("BSS"); the 42.5-43.5 GHz band is allocated to FSS uplinks; the 43.5-47.0 GHz band is allocated to the MSS uplinks and the Radionavigation-Satellite Service; the 47.0-47.2 GHz band is allocated to the Amateur-Satellite Service; and the 47.2-50.2 GHz band is allocated to FSS uplinks.

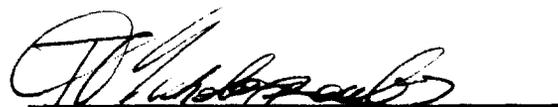
and undisrupted segments of the spectrum, further militating for the requested domestic allocation.

The proposed FSS co-primary allocation will not affect the existing primary allocation of the band to terrestrial Fixed Service both for government and non-government use. To avoid interference between the FSS and the terrestrial Fixed Service, Motorola requests that the Commission adopt the power flux density limits of the ITU Radio Regulations for the 37.5-40.5 GHz band. See Radio Regulations, Art. 28 § 4(6), RR 2578, 2582, 2583, 2584. These limits will allow FSS systems and microwave operators to co-exist on a co-primary basis. Subject to these PFD limits, the Commission should domestically implement the current worldwide primary allocation of the 37.5-38.6 GHz band to the FSS.

Respectfully submitted,

**MOTOROLA SATELLITE
COMMUNICATIONS, INC.**

Michael D. Kennedy
Vice President and Director
Regulatory Relations
Barry Lamberman
Manager, Satellite
Regulatory Affairs
MOTOROLA, INC.
1350 I Street, N.W.
Suite 400
Washington, D.C. 20005
(202) 371-6900



Philip L. Malet
Alfred Mamlet
Pantelis Michalopoulos
Pamela S. Strauss

STEPTOE & JOHNSON LLP
1330 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 429-3000

Its Attorneys

Dated: March 4, 1996

CERTIFICATE OF SERVICE

I, Pamela S. Strauss, hereby certify that a copy of the foregoing Petition For Rulemaking was hand-delivered on this 4th day of March, 1996 to the following:

Richard M. Smith
Federal Communications Commission
Chief, Office of Engineering and Technology
2000 M Street, N.W. Room 480
Washington, D.C. 20554

Tom Mooring
Federal Communications Commission
Office of Engineering and Technology
2000 M Street, N.W.
Washington, D.C. 20554

Michele Farquhar
Federal Communications Commission
Chief, Wireless Telecommunications Bureau
2025 M Street, N.W., Room 5002
Washington, D.C. 20554

Bob James
Federal Communications Commission
Chief, Wireless Telecommunications Bureau
2025 M Street, N.W.
Washington, D.C. 20554



Pamela S. Strauss