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FEDERAL COMMUNICATIONS COMMISSION
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September 13, 1993

Mr. H. Franklin Wright
Federal Communications Commission
Office of Engineering and Technology
Frequency Liaison Branch--Room 7326
2025 M Street, N.W.
Washington, D.C. 20554

In re: Ericsson Business Communications, Inc.
Experimental Authorization KF2XEF
Experimental Report No. 10 (File No. 3675-EX-ML-93)

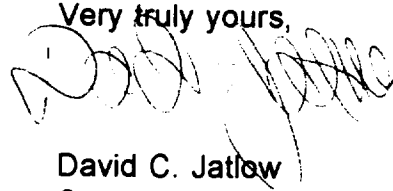
Dear Mr. Wright:

Pursuant to the conditions set forth in the above-referenced authorization, this letter will serve as the tenth Experimental Report of Ericsson Business Communications, Inc. ("Ericsson") for Experimental License KF2XEF.

Ericsson is currently in the process of comparing early Alpha DECT equipment with CT-3 equipment for the purpose of evaluating differences in voice quality, cell size, building penetration and cell capacity.

Ericsson is also currently working with a number of entities looking toward the implementation of Beta systems in an actual working environment.

Very truly yours,



David C. Jatlow
Counsel for Ericsson Business
Communications, Inc.

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FEDERAL COMMUNICATIONS COMMISSION
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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554

In the Matter of

Redevelopment of Spectrum to
Encourage Innovation in the Use
of New Telecommunications
Technologies

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ET Docket No. 92-9

RM-7981

RM-8004

To: The Commission

PETITION FOR RECONSIDERATION

Henry Goldberg

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1229 19th Street, N.W.
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OF COUNSEL

September 13, 1993

SUMMARY

The balance struck in the Commission's Third Report and Order and Memorandum Opinion and Order in the above-captioned proceeding (the "Third R&O") between the needs of microwave incumbents and the interests of those proposing new technologies has been unintentionally skewed against the interests of companies deploying so-called "nomadic" technologies. The delays and uncertainties associated with the Commission's current plan pose a serious threat to the development of Data-PCS and to U.S. leadership in the development of wireless computing technologies, PCS standard setting, and the implementation of a National Information Infrastructure.

Apple therefore urges the Commission to reconsider and clarify certain aspects of the Third R&O by actively encouraging in-band retuning of incumbent microwave facilities or, at a minimum, permitting such retuning among parties who so desire it; applying a "reasonableness" standard with respect to retuning of public safety microwave facilities; adopting a date certain by which the Data-PCS band will be cleared; and clarifying that tax certificates will be available to entities relocated from the unlicensed band.

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of	)	
	)	
Redevelopment of Spectrum to	)	ET Docket No. 92-9
Encourage Innovation in the	)	
Use of New Telecommunications	)	RM-7981
Technologies	)	RM-8004

To: The Commission

PETITION FOR RECONSIDERATION

Pursuant to Section 1.429 of the Federal Communications Commission's ("Commission" or "FCC") Rules, Apple Computer, Inc. ("Apple") hereby submits this petition for reconsideration of the Commission's Third Report and Order and Memorandum Opinion and Order ("Third R&O") in ET Docket No. 92-9, released August 13, 1993.¹

The Third R&O attempts to strike a difficult balance between the needs of microwave incumbents to have a deliberate and secure transition to other frequency bands and the interests of those proposing new technologies for the 2 GHz frequencies to deploy new products and services as soon as possible. Unfortunately, that balance has been unintentionally skewed against the interests of companies who must deploy so-called "nomadic" technologies.

The Third R&O establishes a regulatory plan under which it will be impossible to clear the unlicensed PCS frequencies quickly and in a cost-effective manner. The delays and uncertainties associated with the current plan pose a serious threat to the development of Data-PCS and to U.S. leadership in the development of wireless computing technologies, PCS standard setting, and the implementation of a National Information Infrastructure.

Apple therefore urges the Commission to reconsider and clarify certain aspects of the Third R&O, in particular to foster the timely introduction of nomadic PCS

¹ 58 Fed. Reg. 46547 (Sept. 2, 1993). This Petition is being filed in advance of the deadline for such petitions because certain issues raised in this Petition relate to issues raised in an Emergency Petition, also filed this date.

technologies, such as Data-PCS, which require frequencies to be completely cleared of microwave operations prior to deployment of the first device.

Contemporaneously with the filing of this petition for reconsideration, Apple is filing an Emergency Petition in Docket Nos. 90-314 and 92-100, in order to secure the 1910-1930 MHz band of frequencies for the exclusive use of Data-PCS and other nomadic PCS technologies, to allocate additional unlicensed spectrum adjacent to that band for non-nomadic technologies, and to require frequency coordination prior to the deployment of any non-nomadic devices.

Background

Prior to adoption of the Third R&O, the central problem facing Data-PCS and other nomadic unlicensed services was the so-called "last link" problem, *i.e.*, the need to clear all incumbent microwave stations from the band of frequencies used for Data-PCS before initiating service. Given the operating characteristics of Data-PCS devices and the sensitivity of microwave receivers to interference, coexistence between Data-PCS and microwave operations is impossible. Data-PCS devices will interfere with microwave receivers. As a result, Data-PCS devices cannot be deployed until incumbent microwave stations have been relocated from frequencies used for Data-PCS.

The nomadic nature of Data-PCS devices makes this an especially daunting task. Because such devices can be operated anywhere within the United States, it will not be possible to begin service incrementally by clearing spectrum on a regional basis. Moreover, since Data-PCS does not rely on base stations or other fixed infrastructure, Data-PCS devices cannot be deployed prior to band clearing using frequency coordination in particular markets. Thus, the first Data-PCS device cannot be placed into use until the "last link" has been moved from the affected frequencies.

Compounding the "last link" problem facing Data-PCS is the fact that this problem does not stand in the way of many other unlicensed services. Wireless PBXs and other "fixed" devices can be deployed before band clearing is complete, either by clearing a portion of the band on a regional basis or by engaging in frequency coordination with the remaining incumbents. As a result, these fixed devices will be able to begin using each portion of unlicensed spectrum as soon as it becomes available, thereby occupying all of the unlicensed frequencies before Data-PCS can be introduced.

In addition, the delays and costs associated with relying solely on relocation to the 6 GHz band for clearing the 2 GHz band further threaten the development of Data-

PCS. A number of parties have estimated, and Apple agrees, that it would cost from 50 to 125 million dollars to relocate every incumbent from the 1910-1930 MHz band to the 6 GHz band.² Because of the "last link" requirement, the computer industry faces a "chicken and egg" dilemma of having to fund this expenditure "up front" without having any revenues from the sales of Data-PCS devices.

In addition to the cost of relocation, the delay attendant to clearing all microwave links from the unlicensed frequencies — estimated to be "at a minimum" a three-to-five year process by UTAM³ and no less than three years by the Commission⁴ — stymies a computer industry that has wireless product ready to market and is awaiting only the frequencies. It was to deal with these cost and delay of band clearing problems that Apple proposed a frequency optimization plan for the 2 GHz frequencies, which would increase spectrum efficiency in the microwave bands and free cleared spectrum for PCS use.⁵

For the most part, the "last link" and related problems have not been resolved in the Third R&O. Apple therefore respectfully urges that the Commission reconsider the Third R&O, as discussed below.

I. The Commission Should Actively Encourage In-Band Re-Tuning Of Existing 2 GHz Microwave Facilities To Facilitate The Timely Introduction Of PCS, Particularly Data-PCS And Other Nomadic PCS Technologies.

When the First Report and Order in this proceeding essentially froze the universe of 2 GHz fixed microwave facilities, Apple investigated whether frequency optimization could provide a cost-effective means of meeting some of the spectrum needs of emerging technology service providers. It found that a channel optimization plan

² This figure does not take into account the additional costs of resolving interference problems that may be caused to wide-bandwidth microwave receivers in bands directly adjacent to the unlicensed band.

³ Reply Comments of UTAM, GEN Docket No. 90-314, ET Docket No. 92-100, at 22 (filed July 20, 1993).

⁴ Third R&O at ¶ 24 ("We anticipate that it will take at least three years to reach voluntary or involuntary agreements with the existing licensees in this spectrum and to move their facilities."). When one adds in the one-year "proving in" period for new facilities, it will be at least four years before Data-PCS providers will be able to sell even a single device. This period could be significantly longer if incumbent licensees do not negotiate in good faith, the FCC's dispute resolution process becomes overloaded, or replacement facilities cannot be engineered and constructed expeditiously. Moreover, there is nothing in the Third R&O that ensures that the Data-PCS band ever will be fully cleared.

⁵ E.g., Reply Comments of Apple Computer, Inc., ET Docket No. 92-9, at 6-11 (filed Feb. 12, 1993); Reply Comments of Apple Computer, Inc., GEN Docket No. 90-314, ET Docket No. 92-100, at 5 (filed Jan. 11, 1993); Apple Computer, Inc. Petition for Rulemaking, RM-7618, at 22 (filed Jan. 28, 1991).

would allow significant amounts of spectrum to be cleared with relatively few out-of-band relocations. Even in areas of high population and microwave station density, large amounts of 2 GHz spectrum lie fallow because of the manner in which spectrum assignments are made. The unused channels, however, follow no pattern; that is, while substantial portions of the band remain unoccupied, they are not the same portions at all locations.

The Apple proposal that the Commission referred to in the Third R&O⁶ was a proposal for "up front" frequency optimization of the 2 GHz band to create roughly 60 MHz of cleared spectrum that could be used by both licensed and unlicensed PCS. For a variety of reasons, the Commission rejected the band optimization plan, but applied a lesser variant of that plan, *i.e.*, the case-by-case retuning of individual microwave stations, to public safety stations that are to be grandfathered in the 2 GHz band. In refusing to apply case-by-case retuning to other microwave facilities, the Commission reached too broadly and undercut the use of a long-standing frequency assignment and management tool, which should continue to be available to parties laboring to implement the complex transition of the 2 GHz band from microwave services to PCS.

Retuning of existing microwave facilities within the 2 GHz band is an essential frequency management technique, required to make room for new PCS technologies in a timely, cost effective manner.⁷ While such retuning is a valuable tool for all PCS technologies, it is invaluable for "nomadic," unlicensed technologies, such as Data-PCS, facing the "last link" obstacle discussed above. Without the ability to use retuning, in addition to other interference management techniques, Data-PCS and other nomadic technologies may not be developed.

A modest effort by the Commission to encourage in-band retuning would provide significant returns by increasing the value of PCS licenses at auction, limiting the number of conflicts in which the FCC must become involved, and relieving spectrum congestion. In addition, in-band retuning could well eliminate the need for larger-than necessary spectrum PCS allocations intended to deal with in-band interference. Retuning also would benefit microwave incumbents by enabling some to stay in the 2 GHz band for a significant period and by minimizing the disruption and

⁶ See Third R&O at ¶¶ 27-28.

⁷ The time required to engineer, license, construct, and test new facilities will make it impossible to complete the band-clearing process in a timely fashion if out-of-band relocation is the only available option. The delays associated with relocation will be exacerbated by the demand for equipment and engineering, coordination, and construction services that will exist if all PCS licensees are attempting to relocate stations in the same time frame.

possible system reliability problems associated with relocation to 6 GHz frequencies. Retuning also would reduce the likelihood of interference from deployment of both licensed and unlicensed PCS facilities, which plan to rely on various avoidance schemes to minimize interference.

A. Apple Has Proposed A Well-Established Retuning Methodology That Would Enable The Commission To Increase The Efficiency Of Microwave Spectrum Use, While Releasing Frequencies For PCS Technologies.

Full-scale application of Apple's proposed frequency optimization would result in the maximum benefit for all parties. If, however, the Commission continues to conclude that applying an optimization procedure to the entire band may not, under the present circumstances, be considered practical, some of the methodology of the optimization plan can be applied to analyze specific microwave paths and resolve potential interference problems caused by those paths. In this case, rather than an optimization of the entire 2 GHz band, case-by-case retuning can be viewed as a straightforward frequency assignment and management tool to be used alongside other well-established tools in the frequency coordination process.⁸

For example, Comsearch, in its "Response to the Emerging Technologies Docket No. 92-9", includes retuning among the "alternatives to relocation that will still fulfill the Commission's intentions."⁹

Comsearch goes on to say:

"Our studies and computer modeling indicate that it is not necessary to relocate all current users of the 2 GHz bands. By using the same techniques available to frequency coordination, we believe that substantial amounts of spectrum can be made available without relocating existing users. . . .

"In situations where it is necessary to reengineer the frequencies of selected key paths, new users could propose either frequencies within the 1.85-2.20 GHz that will not cause harmful interference (complete with the

⁸ For example, Apple's optimization methodology can identify the impact that a particular station or group of stations has on overall channel occupancy, and could be used to identify a station that, if removed from service, would free up more than just its own channel. As a result, this methodology would enable PCS licensees to prioritize microwave relocation efforts. (Apple submits that the government band should be used for stations that have an exceptional impact on the usefulness of a particular frequency, in addition to the other uses identified in the Third R&O.) In addition, the methodology could point out options for dealing with adjacent channel interference resulting from wide microwave receiver filters.

⁹ See pages 11-13 (filed June 5, 1992).

necessary antenna and equipment configurations), or propose to relocate them to any of the available relocation bands.

"This approach will accommodate existing 2 GHz users in a manner that is most advantageous since the new users can propose coordinated upgrades to existing user's systems instead of relocating them. Relocation can be reserved for those key paths, and relocation to another band can be used as a final step if none of the other options is feasible. This also will minimize the disruption to the public. In addition, this will be conducive to the introduction of new services since these new service providers will be able to specify cost-effective alternatives to full-scale relocation."¹⁰

Apple believes Comsearch's description of the role of retuning is valid and that the Commission should continue to allow retuning in instances of PCS-microwave accommodation, just as it allows it now to facilitate microwave frequency coordination and assignment.

B. The Commission's Rejection Of Retuning For All But Public Safety Microwave Incumbents Was Premature And Misplaced.

The Commission rejected retuning for all but public safety microwave incumbents, stating that Apple's proposal was not feasible for non-public safety incumbents, who could be required to move to another frequency band. Therefore, the Commission believed that an "intervening relocation" would increase the overall cost of relocations, as well as the cost to licensed PCS providers by increasing the number of microwave facilities they would have to pay to relocate. The Commission added that retuning would burden non-public safety incumbents with two relocations instead of only one.¹¹

For the following reasons, the Commission's rejection of retuning on these grounds was premature and misplaced, and will force all PCS technology providers to employ only the time-consuming, expensive, and cumbersome relocation process in order to clear spectrum.

¹⁰ *Id.*

¹¹ Third R&O at ¶ 29.

1. Retuning will not impose undue costs on PCS licensees or providers of unlicensed devices and facilities.

The Commission's belief that "[a]ny intervening relocation would increase the overall cost of relocating the incumbent fixed microwave facilities"¹² ignores the significant benefits of delaying some or all relocations, the very small investment required to re-tune stations relative to the costs of building new facilities,¹³ and the fact that some re-tuned stations might never need to be moved from the 2 GHz band.

By identifying frequencies that are not needed in the immediate future and re-tuning incumbents to those frequencies, licensed PCS providers would be able to clear some spectrum quickly, launch their services and begin receiving revenue, and then clear additional spectrum as needed.¹⁴ For many providers, the benefit of deferring some relocation costs would far outweigh the modest costs of re-tuning. Under the Third R&O, however, PCS providers would not have the option of choosing which approach "costs" less; rather, they would be required to pay immediately the full costs of relocation or share the frequencies with microwave incumbents and employ interference "avoidance" techniques, whose efficacy is unproved and highly controversial.

Indeed, if relocation is the sole approach available for band clearing, it will dramatically and unnecessarily increase the costs of launching a PCS service, making it especially difficult for smaller entities and others without deep pockets or who overextended themselves in acquiring a PCS license by auction. It also will increase the risk of interference to microwave incumbents and, thereby, burden the Commission's resources for investigating and resolving interference disputes.

Moreover, contrary to the Commission's belief, retuning would not "increase the cost to licensed emerging technology providers by increasing the number of fixed microwave facilities that they may have to pay to relocate."¹⁵ Apple's retuning proposal would not permit PCS providers to "dump" facilities into others' spectrum;

¹² *Id.*

¹³ Apple estimates that re-tuning would cost approximately \$15,000 per station, while relocation would cost approximately \$250,000 per station. See also Third R&O at n.37 (noting that re-tuning may be relatively inexpensive because existing equipment can continue to be utilized).

¹⁴ The Commission's decision to include frequencies licensed pursuant to Parts 22 and 94 in the relocation plan will increase the amount of spectrum available for emerging technologies, thereby potentially permitting greater use of phased relocation and short-term use of reserve bands for in-band re-tuning.

¹⁵ Third R&O at ¶ 29.

rather, whenever incumbent stations were retuned within the 2 GHz band, the entity that performed the retuning would remain responsible for the costs of any subsequently-required out-of-band move. Thus, retuning would not result in cost-shifting between licensed and unlicensed services.¹⁶

2. Retuning need not burden microwave incumbents.

The Commission believes that retuning would burden non-public safety microwave incumbents with having to "relocate" twice.¹⁷ Retuning, however, cannot be characterized as a "relocation" in anything approaching the context of a move to 6 GHz. Among many other benefits, there is no risk presented by retuning caused by major changes in propagation characteristics, comparable to the uncertainties exposed by a major frequency relocation, and thereby the reliability of the path need not be an additional consideration.

Retuning would be applied when it represents the best available option, upon consideration of the many mechanical, logistical, and financial concerns involved in frequency-reengineering a path. Retuning within the 2 GHz band, which would be facilitated in some cases if the Commission sets aside reserve bands in the midst of the band as Apple has proposed elsewhere,¹⁸ may involve a set of hardware changes, some of them requiring factory parts or processes and others within the scope of field practice. Whether a particular radio, because of construction, age, or the availability of parts or skilled engineering personnel, is amenable to retuning will be just one of the factors that will determine if retuning is the preferred option. The degree of service disruption under the various alternatives will be another of the many factors that will be considered.

Even if one describes retuning as a "first relocation," many retuned incumbent licensees would not be required to move to another band for a significant period of

¹⁶ For Data-PCS and other unlicensed services, re-tuning and relocation should be conducted by a single entity acting on behalf of all providers. Apple notes that, while the Unlicensed PCS Ad Hoc Committee for 2 GHz Microwave Transition and Management ("UTAM") may ultimately be designated as such an entity, it would be premature to do so at this point. Under the Commission's current spectrum allocation plan, "fixed" and "nomadic" devices will share the unlicensed band. While entities planning to introduce these devices share certain interests, on some issues their interests diverge. It remains unclear whether UTAM will fairly and adequately respond to the needs of all potential users of the unlicensed band. Apple accordingly urges the FCC to take no action that will designate (or have the appearance of designating) UTAM as the unlicensed industry's representative until it has demonstrated that it will resolve fairly the potentially conflicting needs of fixed and nomadic service providers.

¹⁷ Third R&O at ¶ 29.

¹⁸ See Emergency Petition of Apple Computer, Inc. (filed Sept. 13, 1993).

time, if ever. As the Commission itself recognized, particularly in areas where only limited PCS services will be provided, PCS providers, except those providing nomadic technologies, will have no need to clear all available spectrum and, therefore, will not incur the substantial costs of doing so in the near term, or perhaps ever.¹⁹ When one considers the fact that more than two-thirds of all 2 GHz microwave stations are licensed to power, petroleum, and railroad entities,²⁰ many of which operate in relatively less populated areas where the demand for licensed PCS services will be more limited, many PCS providers will not spend \$250,000 or more per station to move every station within their service areas.²¹

C. At The Very Least, The Commission Should Permit Retuning In Appropriate Circumstances Among Parties Who So Desire It.

Notwithstanding the foregoing, if the Commission declines to encourage retuning actively, it should at the very least clarify the Third R&O to permit in-band moves on a case-by-case basis. At present, the Third R&O could be construed to forbid retuning, since it states that the Commission will "authorize relocation within the 2 GHz only of incumbent public safety facilities . . .",²² thereby implying that voluntary retuning of non-public safety facilities would not be authorized by the Commission even where agreed to by all affected parties.

As discussed above, however, retuning is a standard tool used to facilitate microwave frequency coordination and assignment and, in the present context, offers many benefits to licensed and unlicensed PCS providers and to microwave incumbents. At a minimum, therefore, it should be allowed whenever the affected parties agree.

¹⁹ See Third R&O at ¶ 17 (a "significant number of fixed microwave facilities, particularly in rural areas, may remain in the band and not be subject to relocation for a substantial period of time . . ."), *id.* at n.38 (re-tuning of public safety licensees "might be feasible, for example, in areas where only limited PCS service is envisioned . . ."). Indeed, the Commission's description of the plan adopted in the Third R&O recognizes that relocation will not always be required. See Third R&O at ¶ 1 ("the Commission is adopting a plan that will provide for the fair and equitable sharing of 2 GHz spectrum by new services and the existing fixed microwave services that currently use these frequencies, and for the relocation of existing 2 GHz facilities to other spectrum where necessary." (emphasis supplied).

²⁰ See "Creating New Technology Bands for Emerging Telecommunications Technology," OET/TS 01-1, at 8 (6,579 of 9,258 facilities in the 1850-1990 MHz band are licensed to power, petroleum, and railroads).

²¹ In rejecting in-band retuning, the Commission also cited the argument made by American Personal Communications and UTC that re-tuning cannot be permitted because many incumbents that use a channel in the unlicensed band do so because other 2 GHz microwave channels are unavailable. Third R&O at ¶ 28. Obviously, if there is no 2 GHz frequency to which a given station can be re-tuned, that station will need to be relocated from the 2 GHz band. This in no way means, however, that stations that can be re-tuned should not be re-tuned.

²² Third R&O at ¶ 29.

Without the flexibility to employ retuning in appropriate circumstances, PCS providers and incumbent licensees would be limited to relocation to the 6 GHz band, even when the needs of the parties would be significantly better served by an in-band move. Moreover, it would deny providers of nomadic PCS technologies the most powerful approach for promptly and cost-effectively clearing the unlicensed frequencies.

D. The Commission Should Apply A "Reasonableness" Standard With Respect To Retuning Of Public Safety Microwave Facilities.

While the Commission's decision to permit in-band retuning of public safety facilities is a significant step forward, the Commission should clarify that public safety licensees cannot unreasonably refuse to retune existing facilities if "an adequate showing is made that such a relocation will not adversely affect" its operations.²³ Similarly, while the Commission will require the written consent of a PCS licensee before a retuned public safety microwave station can be placed in the licensee's frequency,²⁴ the Commission should make clear that such consent cannot be withheld unreasonably.

The Third R&O repeatedly expresses the Commission's desire that parties will act reasonably in negotiating and arranging relocations and requires that parties negotiate in good faith during the mandatory negotiation period.²⁵ In addition, it makes clear that public safety licensees are not grandfathered at the exact frequency they currently occupy.²⁶ The Commission has not granted public safety incumbents and PCS licensees the right to be unreasonable and veto in-band relocations, when an adequate showing is made that such a relocation will not adversely affect the public safety incumbent, or any other fixed microwave incumbent or PCS licensee.

Thus, the Commission should clarify that, when consent is required, it cannot be withheld unreasonably. Without such a clarification, the possibility exists that a licensee will attempt to hold Data-PCS providers hostage, agreeing to relocate or accept a relocated incumbent only in exchange for a significant financial premium.²⁷

²³ See Third R&O at ¶ 29.

²⁴ Third R&O at n.38.

²⁵ See Third R&O at ¶¶ 13-16, 23, 27, 29.

²⁶ Third R&O at ¶ 29.

²⁷ Apple does not suggest that most, or even many, licensees will act in this fashion. However, in the case of Data-PCS it would take only a single holdout to delay or destroy the introduction of service.

II. The Commission Should Adopt A Date Certain Of One Year After The Close Of The Mandatory Negotiation Period By Which All Microwave Incumbents Will Be Relocated Or Re-Tuned Out Of The Data-PCS Band.

While the Third R&O adopted a shorter mandatory negotiation period for unlicensed devices, it failed to address the fact that the band clearing process is entirely open-ended, *i.e.*, there is no way for a potential service provider to know with any certainty when, and indeed whether, the Data-PCS band will be available for service. After the close of the one-year period, if an agreement has not been reached with each of the microwave incumbents to retune or relocate, the PCS provider will need to begin the involuntary relocation process. In such cases, it may take years for the FCC to issue decisions and for any appeals of such decisions to be resolved. Because of the nomadic PCS technologies' "last link" problem, during this protracted and uncertain process, not a single Data-PCS device could be deployed.

Apple and other computer companies will not invest the significant amounts necessary to develop and manufacture Data-PCS products and to clear the Data-PCS band unless there is a date certain for gaining access to frequencies. Accordingly, the Commission should take steps now to prepare for the virtual certainty that, in some cases, the parties will be unable to resolve matters through negotiation, mediation, or arbitration.

The Commission's goal in this regard should be to create a process that will ensure that, within one year of the close of the mandatory relocation period, all microwave incumbents will be relocated or retuned out of the frequencies used for Data-PCS. To this end, the Commission's rules should require that all disputes regarding involuntary relocation will be disposed of by the Commission within six months of the close of the mandatory negotiation period.²⁸

III. The Commission Should Clarify That Tax Certificates Will Be Available To Incumbents Relocated from the Unlicensed Band.

In setting forth its decision to grant tax certificates, the Commission stated that "we are authorizing the grant of tax certificates for any sale or exchange of property in connection with voluntary agreements for the relocation of fixed microwave facilities

²⁸ In addition, the Commission should create a task force of OET/PRB staff to serve as a "quick response" team to resolve conflicts that arise during the mandatory negotiation period. In order to expedite consideration of cases involving a move to the government band, the Commission should include NTIA as an *ex officio* member of the quick response team, or should create a separate FCC-NTIA inter-agency group

during the fixed two year period.”²⁹ The public interest justifications for this decision apply equally to licensed and unlicensed PCS; however, because there is no “fixed two year period” with respect to unlicensed services,³⁰ the Commission appears inadvertently to have limited the availability of tax certificates to incumbent licensees relocated from the licensed PCS band. Apple requests that the Commission clarify that tax certificates will be granted to all incumbents who enter into voluntary agreements to relocate, whether from the licensed or the unlicensed band.

Conclusion

In the nearly three years that have passed since Apple submitted its Petition for a Rulemaking on Data-PCS, the Commission has done a great deal to make Data-PCS possible. However, the delays and uncertainties associated with the Third R&O threaten to unravel this progress, and may prevent Data-PCS from developing. Apple therefore urges the Commission to reconsider and clarify those aspects of the Third R&O discussed above.

Respectfully submitted,

APPLE COMPUTER, INC.

By: /s/ Henry Goldberg
Henry Goldberg
Mary J. Dent

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Its Attorneys

September 13, 1993

²⁹ Third R&O at ¶ 42.

³⁰ See Third R&O at ¶¶ 2, 23 (adopting one-year mandatory negotiation period for unlicensed services).

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Petition for Reconsideration was served via first-class, postage-prepaid mail, or by hand delivery where indicated by an asterisk (*), on this 13th day of September, 1993, to the parties listed below:

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