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

In the Matter Of:

Mobile Telecommunication
Technologies Corporation

Petition for Rulemaking to
Allocate 150 kHz in the 930-931

MHz Band and to Establish Rules
and Policies for a New Nationwide
Wireless Network (NWN) Service

| New Nation | Ne

### PETITION FOR RULEMAKING

Richard E. Wiley R. Michael Senkowski David E. Hilliard Eric W. DeSilva WILEY, REIN & FIELDING 1776 K Street, N.W. Washington, D.C. 20005 (202) 429-7000

for

MOBILE TELECOMMUNICATION
TECHNOLOGIES CORPORATION

Dated: November 12, 1991



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

In the Matter Of:		
Mobile Telecommunication	)	
Technologies Corporation	)	
	)	
Petition for Rulemaking to	) RM	
Allocate 150 kHz in the 930-931	)	
MHz Band and to Establish Rules	)	
and Policies for a New Nationwide	)	
Wireless Network (NWN) Service	)	

## PETITION FOR RULEMAKING

Richard E. Wiley
R. Michael Senkowski
David E. Hilliard
Eric W. DeSilva
WILEY, REIN & FIELDING
1776 K Street, N.W.
Washington, D.C. 20005
(202) 429-7000

for

MOBILE TELECOMMUNICATION
TECHNOLOGIES CORPORATION

Dated: November 12, 1991



### **TABLE OF CONTENTS**

SUM	MARY		iv
I.	INTRO	DDUCTION	1
	A.	Mtel Consistently Has Been a Pioneer In Developing And Implementing High Technology Wireless Services	1
	В.	Mtel Has Developed A Needed, Affordable and Efficient Nationwide Wireless Network Service	4
II.		ISION OF NWN WOULD MEET A SIGNIFICANT DEMAND TWO-WAY PORTABLE DATA COMMUNICATIONS	8
	A.	There is an Increasing and Unaddressed Demand for Economic, Two-Way Portable Data Communications	8
	В.	NWN Will Allow Virtually Unlimited User Access for Message Origination	11
	C.	NWN Utility Would be Enhanced By Permitting Use of NWN as an "Answer-Back" Service	12
III.	THAT	C'S MODEL NWN SYSTEM ARCHITECTURE ILLUSTRATES OF EFFICIENT, EXPANDABLE AND RELIABLE TWO-WAY MUNICATIONS SERVICE CAN BE PROVIDED TODAY	13
	A.	Mtel's Model NWN System	13
	B.	Mtel's NWN System Capacity	17
IV.		COMMISSION SHOULD ALLOCATE 150 kHz FROM THE 930- Hz BAND FOR AN NWN SERVICE	18
V.	PROC	COMMISSION SHOULD DEVELOP NWN LICENSING EDURES AND STANDARDS THAT FOSTER COMPETITION IOTE INDIVIDUALITY AND DISCOURAGE SPECULATION	20
	A.	NWN Licensing Procedures and Standards Should Accommodate	20



	В.	NWN Rules Should Provide Licensees Flexibility to Design Unique Systems
	C.	The Commission Should Adopt Rules that Discourage the Filing of Speculative Applications
		1. The Commission Should Adopt Stringent Threshold Filing Requirements
		2. The Commission Should Use Streamlined Comparative Hearings to Award NWN Licenses
		3. The Commission Should Adopt Strict Antitrafficking Rules . 30
VI.	CONC	<b>CLUSION</b>
APPE	NDIX A	A - Mtel's Model NWN System Architecture TAB A
I.	FORW	ARD AND REVERSE CHANNEL SIMPLEX OPERATION A2
II.		VARD CHANNEL TRANSMISSIONS IN MTEL'S MODEL SYSTEM
	A.	Mtel's National Simulcast Provides an Efficient Transmission Method for Forward Channel Messaging
	B.	Mtel's Use of Innovative Enhanced Multitone Modulation Technology Significantly Increases Total Forward Channel Throughput
	C.	Adaptive Zoning of the Forward Channel Transmission Network Allows Mtel's Model NWN System to Increase Throughput to Satisfy Demand
	D.	Forward Channel Transmission Protocol
III.		RSE CHANNEL TRANSMISSIONS IN MTEL'S MODEL NWN EM
	A.	Deterministic Interval Protocol
	В.	Contention Interval Protocol



APPE	NDIX B - Simulcast Network Primer	ГАВ	3 B
I.	TRADITIONAL SIMULCAST SYSTEMS		Bl
II.	MODERN SIMULCAST TECHNIQUES		B2
III.	SIMULCASTING COMBATS MULTIPATH		B4
IV.	SIMULCASTING VERSUS CELL BASED RE-USE		В5
APPEN	NDIX C - Proposed Rules	ΓΑΒ	3 C



# DOCKET

# Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

#### API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

#### **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

#### **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

## **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

