APPLICANT: Alcatel-Lucent FCC ID: ASSONEBTS-10



Timco Engineering Inc.
FCC Authorized Telecommunications
Certification Body (TCB)

March 12, 2007

Sid Sanders - President Timco Engineering Inc. 849 N.W. State Road 45 P.O. Box 370 Newberry, Florida 32669 **Alcatel-Lucent Inc.** 67 Whippany Road Whippany, NJ 07981

Dear Mr. Sanders

The Lucent FLEXENT® Broadband PCS UMTS-CDMA Transceiver System (1900), the subject of this request for a Class II Permissive Change, was previously authorized for UMTS operation, under FCC ID: AS5ONEBTS-10, as a 40 watt single carrier UMTS Transceiver and as a 20 W/ carrier multi carrier CDMA Transceiver and as a 40 watt single carrier CDMA Transceiver over the Frequency Range of 1930 to 1990 MHz. Lucent hereby requests for the CDMA emission designator 1M25F9W, that the frequency range be extended to include the "G" Block spectrum of 1990 to 1995 MHz recently added by the FCC. There were no physical, hardware or circuit changes to either the MCR-1900 or to the PCS 2 Power Amplifier Module, P2PAM which were required to accommodate this additional spectrum. The MCR-1900, which is the frequency generating and stabilizing component of the AS5ONEBTS-10 authorization, was designed to accommodate this additional spectrum. Only a retuning of the post transmit amplification filter, the Dual Duplex (DDpx) Low Loss Transmit Filter, was required. All required supporting exhibits, not previously submitted with the initial filing, are attached.

The FLEXENT® PCS UMTS-CDMA EDPD Transceiver System with Enhanced Digital Pre-Distortion (EDPD) configures a CDMA Multi Carrier Radio (MCR-1900) and PCS 2 Power Amplifier Module (P2PAM) to allow for increased capacity. The Transceiver System includes the principle RF components which have been previously filed under this FCC ID: AS50NEBTS-10 and various other FCC ID's. These include the (1) Multi-Carrier Radio (MCR1900), Model BNJ64, authorized under FCC ID: AS50NEBTS-09, (2) P2PAM power amplifier authorized under FCC ID: AS50NEBTS-06, (3) 60 MHz wide Dual Duplex (DDpx) low loss transmit filters covering the PCS Spectrum 1930-1990 MHz and (4) Rubidium and Crystal Reference Oscillator Module (OMR/OMC) 15 MHz.

This Class II change applies to the two Grant delineations for 1M25F9W CDMA Emissions designator authorized under FCC ID: AS50NEBTS-10. The only change is the addition of G Block spectrum under both of the CDMA 1M25F9W emissions designators. The output power remains at 40 watts for the one carrier configuration and 20 watts/carrier for multi-carrier applications. The measurement exhibits attached to this application demonstrate full compliance with FCC Part 24 Subpart E – Broadband PCS following the procedural requirements specified in FCC Part 2 Subpart J – Equipment Authorization Procedures. The data, summarized below, is in the form presently used by the Commission's Radio Equipment List.

Equipment Identification: AS5ONEBTS-10

Rules Part Number: Part 24, Subpart E – Broadband PCS

Frequency Range: Transmit 1930–1995 MHz (All PCS Blocks) (A – G)

Output Power: 0.040 to 40.0 Watts per single CDMA carrier - 40 Watts Total
Output Power: 0.020 to 20.0 Watts per CDMA carrier - 6 carriers 120 Watts Total

Frequency Tolerance: ± 0.05 ppm Emission Designator: $\pm 1M25F9W$

Attached are the FCC Form 731 (Application for Equipment Authorization – Radio Frequency Devices), the required measurement data and exhibits specific to this request for initial equipment authorization of the PCS CDMA EDPD Transceiver System. The technical or non-technical contact at Lucent will comply with any request for additional information

Alcatel-Lucent Inc. - ProprietaryUse pursuant to Company Instructions.

should the need arise. The attached exhibits with the applicable FCC Rule section are assembled and presented in accordance with the *Table of Contents* attachment. Included is a formal letter requesting confidentiality for the following exhibits:

Exhibit # FCC Rule Section Exhibit Title

Exhibit 4 Section 2.1033(c) (8,9) Active Circuit Devices Drive Levels, Tune-Up procedures Exhibit 5 Section 2.1033(c) (10) Complete Circuit Diagrams, Circuitry for Spurious Suppression Exhibit 6 Section 2.1033(c) (12,3) Installation and Operating Instructions

Should there be any questions or procedural issues please feel free to contact me by email and/or phone. Sincerely,

Rudolf J. Pillmeier

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Att. Table of Contents for the FLEXENT® PCS CDMA EDPD Transceiver System Product Certification Report

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Cover Letter Request for Confidentiality

Exhibit #	FCC Rule Number	<u>Description</u>	
Exhibit 1	Section 2.1033(a)	FCC Form 731	
Exhibit 2	Section 2.911 (d)	Qualifications and Certifications	
Exhibit 3	Section 2.1033(c) (1,2,4,5,6,7)	Manufactures, FCC Identifier, Emission, Frequency Range and RF Power Range	
Exhibit 4	Section 2.1033(c) (8.9)	Active Circuit Devices Drive Levels, Tune-Up procedure	(Confidential)
Exhibit 5	Section 2.1033(c) (10)	Complete Circuit Diagrams	(Confidential)
Exhibit 6	Section 2.1033(c) (12,3)	Instruction Book	(Confidential)
Exhibit 7	Section 2.1033(c) (10)	Circuitry for determining frequency and Suppression of Spurious	(Confidential)
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Exhibit 8	Section 2.1033(c) (11)	Drawing of the Identification Label	
Exhibit 9	Section 2.1033(c) (12)	Photographs of the Equipment	
Exhibit 10	Section 2.1033(c) (13)	Description of Modulation System	

Test Report Exhibits

Exhibit #	FCC Rule Number	Description of Test Report Exhibits
Exhibit 11	Section 2.1033(c) (14)	Listing of Required Measurements
Exhibit 12	Section 2.1046	Measurement of Radio Frequency Power Output
Exhibit 13	Section 2.1047	Measurement of Modulation Characteristics
Exhibit 14	Section 2.1049	Measurement of Occupied Bandwidth
Exhibit 15	Section 2.1051	Measurement of Spurious Emissions at Antenna
Exhibit 16	Section 2.1053	Field Strength of Spurious Radiation
Exhibit 17	Section 2.1055	Measurement of Frequency Stability