



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

Alcatel-Lucent Inc.
67 Whippany Road
Whippany, NJ 07981

May 14, 2008

Sid Sanders - President
Timco Engineering Inc.
849 N.W. State Road 45
P.O. Box 370
Newberry, Florida 32669

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 under **FCC ID: AS5ONEBTS-10** as a CDMA Transceiver for 20 W/ carrier multi carrier operation for 1 to 6 carriers when using up to 3 P2PAM amplifiers. Lucent hereby requests, for the CDMA emission designator **1M25F9W**, that multi carrier operation for 7 and 8 carriers at 20 W/carrier 160W total be added when using up to 4 P2PAM amplifiers.. There were no physical, hardware or circuit changes required to either the PCS Multi Carrier Radio, **MCR-1900**, or to the PCS 2 Power Amplifier Module, P2PAM. Only the passive couplers necessary to add the amplifier into the combined amplification string was changed to accommodate this additional capacity. The **MCR-1900**, which is the frequency generating and stabilizing component of the **AS5ONEBTS-10** authorization, was designed and individually authorized as an 11 carrier radio under **FCC ID: AS5ONEBTS-09** and has not changed. 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 four PCS 2 Power Amplifier Module (**P2PAM**) to allow for increased RF carrier count but does not change the previously authorized per carrier RF power. The Transceiver System includes the principle RF components which have been previously filed under this FCC ID: **AS5ONEBTS-10** and various other FCC ID's. These include the (1) Multi-Carrier Radio (**MCR1900**), Model BNJ64, authorized under FCC ID: **AS5ONEBTS-09**, (2) P2PAM power amplifier authorized under FCC ID: **AS5ONEBTS-06**, (3) 60/65 MHz wide Dual Duplex (DDpx) low loss transmit filters covering the PCS Spectrum 1930-1995 MHz and (4) Rubidium and Crystal Reference Oscillator Module (OMR/OMC) 15 MHz.

This Class II change applies to the Grant delineations for **1M25F9W** CDMA Emissions designator authorized under **FCC ID: AS5ONEBTS-10**. The only change is the addition of another transmit amplifier to accommodate the additional two carriers of operation under the CDMA **1M25F9W** emissions designators. The total output power for the 4 amplifier configuration will be 160 Watts total for the 8 carrier application at 20 W/carrier. 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:	0.02 to 20 Watts per CDMA carrier – 8 carriers max 160 Watts Total
Frequency Tolerance:	± 0.05 ppm
Emission Designator:	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. - Proprietary
Use 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

Technical Manager
FCC/EMC Compliance Test Group
Whippany, NJ
Phone: 973-386-3837
email: rpillmeier@alcatel-lucent.com

Primary Administrative Contact

Rudolf J. Pillmeier
Technical Manager
FCC Compliance
Whippany, NJ
Phone: 973-386-3837
email: rpillmeier@alcatel-lucent.com

Filing Engineer

W. Steve Majkowski NCE
CDMA Filing Lead
Phone 973-386-3812 Lab 973-386-2135
email: majkowski@alcatel-lucent.com

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

TABLE OF CONTENTS

Cover Letter
Request for Confidentiality

<u>Exhibit #</u>	<u>FCC Rule Number</u>	<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)
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

<u>Exhibit #</u>	<u>FCC Rule Number</u>	<u>Description of Test Report Exhibits</u>
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



Subject: **REQUEST FOR CONFIDENTIALITY for
FCC Product Certification under FCC ID: AS5ONEBTS-10, of the
FLEXENT® PCS CDMA Transceiver System with Enhanced Digital
Pre-Distortion (EDPD)**

Date: **May 14, 2008**

From: 67 Whippany Road
Whippany, NJ 07981

Rudolf J. Pillmeier
Telephone: 973-386-3837
E-Mail: rpillmeier@lucent.com

Mr. Sid Sanders, President
Timco Engineering, Inc.
849 N.W. State Road 45,
P. O. Box 370
Newberry, Florida 32669

Dear Mr. Sanders:

On behalf of Lucent Technologies, I hereby request that the following exhibits, included in this or previous Application for Certification, under **FCC ID: AS5ONEBTS-10**, covering the Lucent Technologies Inc. FLEXENT® PCS CDMA Transceiver System with Enhanced Digital Pre-Distortion (EDPD), be maintained as confidential information and not be made available for public inspection at any time.

<u>Exhibit #</u>	<u>FCC Rule Section</u>	<u>Exhibit Title</u>
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

These exhibits contain Lucent Technologies proprietary information that is considered to be trade secrets, with possible patents pending, and the property of Lucent Technologies, pursuant to the provisions of Part 0.457(d) of the Commission's Rules. These exhibits also contain design information that is highly proprietary to Lucent's contracted manufacturer/supplier.

Exhibits **4, 5 and 6** are highly proprietary and contain critical design information that can not be made available for public inspection. This information is proprietary both to Lucent Technologies and to Lucent's contracted manufacturer/supplier. The Instruction Manual, **Flexent® CDMAModular Cell 4.0 Operations, Administration and Maintenance - Release 25.0**, included in **Exhibit 6**, is not furnished to the user, except under very exceptional and very limited circumstances. This manual contains highly proprietary circuit, equipment and architecture descriptions that must not be made available for public inspection. The cover/title page is explicitly labeled "*Unpublished and Not for Publication*".

Thank you for your consideration in this matter.

Sincerely,

Rudolf J. Pillmeier
Technical Manager
FCC/EMC Compliance Test Group
Whippany, NJ

Timco Engineering, Inc. TCB Application Form 731

Rev 15 April 08

For Timco Use Only	
Job Number	
Scope	
Date Filed	
Conf. #	
KDB Tracking #	
Grant Note	

Item 1. Applicant's complete, legal business name:		Alcatel-Lucent	
Applicant's FCC Registration Number (FRN): 0003-7104-31			
Item 2. Applicant's mailing address:		<i>fill in fields, as appropriate</i>	
Address Line 1: 3B-214		P.O. Box: 903	
Line 2: 67 Whippany Road			
City: Whippany			
State: NJ		Country (if foreign address):	Zip/Postal Code: 07981-0903
Item 3. Applicant Contact Person: https://fjallfoss.fcc.gov/oetcf/eas/reports/GranteeSearch.cfm			
First Name: Rudolf		Middle Initial: J	Last Name: Pillmeier
Title: FCC Compliance Manager		Telephone: 973-386-3837	
E-mail: rpillmeier@alcatel-lucent.com		Fax No.:	
Item 4.	FCC ID consisting of:	Grantee Code: AS5	Equipment Product Code (14 characters maximum): ONEBTS-10
Item 5. Application Contact: All questions regarding the application will be directed to this contact. The Original Grant and Invoice will be sent to this contact.			
Firm Name: Alcatel-Lucent		Telephone: 973-386-3837	Ext: Fax: No.:
First Name: Rudolf		Middle Initial: J	Last Name: Pillmeier
Address Line 1: 3B-214		P.O. Box: 903	
Address Line 2: 67 Whippany Road		City: Whippany	State: NJ
Country (if foreign address):		Zip/Postal Code: 07981-0903	
E-mail: rpillmeier@alcatel-lucent.com		Telephone: 973-386-3837	Fax:
Item 6. Test Firm Used to Take Measurements:			
Firm Name:		Telephone:	Ext.: Fax No.:
First Name:		Middle Initial:	Last Name:
Address Line 2:		City:	State:
Country (if foreign address):		Zip/Postal Code:	
E-mail:			
FCC Registered Test Site Number. <i>Required for Part 15 and 18 applications.</i>			
Item 7. * Does this application include a request for SHORT-TERM confidentiality for any portion(s) of the data contained in this application pursuant to FCC DA 04-1705 dated 6/15/2004? * Does this application include a request for confidentiality for any portion(s) of the data contained in this application pursuant to 47 CFR 0.459 of the Commission Rules?			SHORT-TERM request: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PERMANENT request: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Item 8. *Is this application for modular approval? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Modular Type: <i>(only complete if you answered Yes to Item 8)</i>			
<input type="checkbox"/> Single Modular Approval		<input type="checkbox"/> Split Modular Approval	
<input type="checkbox"/> Limited Single Modular Approval		<input type="checkbox"/> Limited Split Modular Approval	
Item 9. *Is this application for software defined radio authorization? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Item 10. Equipment Class: <i>3-digits required</i> PCB		Description of Product as it is marketed Broadband PCS UMTS-CDMA EDPD Transceiver System	

Item 11. *Application is for:

Original Equipment

Change in identification of presently authorized equipment:

Original FCC ID

Grant Date (MM/DD/YYYY)

AS5ONEBTS-10

03/21/2005

Class II permissive change or modification of presently authorized equipment

Class III permissive change to software defined radio

Note: this may only be filed for applications pertaining to Software Defined Radio

Item 12. Is the equipment in this application:

* (a) a composite device subject to an additional equipment authorization?

Yes No

* (b) part of a system that operates with, or is marketed with, another device that requires an equipment authorization?

Yes No

If either of the above questions is answered "Yes" complete section 12 (c).

(c) The related application:

has been granted under the FCC ID(s) listed to the right

is in the process of being filed under the FCC ID(s) listed to the right

is pending with the FCC under the FCC ID(s) listed to the right

has a mix of pending and granted statuses under the FCC ID(s) listed to the right

i. FCC ID:
ii. FCC ID:
iii. FCC ID:
iv. FCC ID:

Item 13. * Equipment will be operated under FCC Rule Part(s):

24E

Item 14. EQUIPMENT SPECIFICATIONS: *Where applicable*

Frequency range in MHz		Rated RF power output IN WATTS	Frequency tolerance		Emission Designator (See 47 CFR 2.201 and 2.202)	FCC Rule Part (for Multiple Rules)
Low Freq	High Freq		%, Hz, ppm			
1930	1995	20	0.05	ppm	1M25F9W	

Equipment Authorization Waiver*

Is there an equipment authorization waiver associated with this application?

Yes No

If there is an equipment authorization waiver associated with this application, has the associated waiver been approved and all information uploaded?

Yes No

(Continued on Next Page)

Read each certification carefully before answering and signing this application
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. TITLE 47, SECTION 503).
Item 15. APPLICANT/AGENT CERTIFICATION:
I certify that I am authorized to sign this application. All of the statements herein and the exhibits attached hereto are true and correct to the best of my knowledge and belief. In accepting a Grant of Equipment Authorization issued by the TCB, under the authority of the FCC, as a result of the representations made in this application, the applicant is responsible for (1) labeling the equipment with the exact FCC ID specified in this application, (2) compliance statement labeling pursuant to the applicable rules, and (3) compliance of the equipment with the applicable technical rules. If the applicant is not the actual manufacturer of the equipment, appropriate arrangements have been made with the manufacturer to ensure that production units of this equipment will continue to comply with the FCC's technical requirements.
Authorizing an agent to sign this application is done solely at the applicant's discretion; however, the applicant remains responsible for all statements in this application.
If an agent has signed this application on behalf of the applicant, a written letter of authorization which includes information to enable the agent to respond to the above Section 5301 (Anti-Drug Abuse) Certification statement has been provided by the applicant. It is understood that the letter of authorization must be submitted to the FCC upon request, and that the FCC reserves the right to contact the applicant directly at any time.
If different from Applicant's contact (Item 3) you must supply a Letter of Authorization. This authorization letter must be signed by the applicant / grantee (Item 3). The authorization letter MUST name the person that they are authorizing to sign on their behalf.
*Signature of Authorized Applicant:
* Name & Title of Authorized Signature: Rudolf J Pillmeier
Company Name of Person Signing Application: Technical Manager, Whippany FCC/EMC Compliance Test Group
NOTE: An asterisk '*' preceding a field indicates it must be completed.