Docket No.: 1999-0281 01-13-2000 RECORI DEPARTMENT OF COMMERCE Form PTO-1595 Patent and Trademark Office (Rev. 6-93) OMB No. 0661-0011 (exp. 4/94) To the Assistant Commissioner of Patents 101243924 opy thereof. 1. Name of conveying party(ies): (ies) Cederic Fung LAM AT&T Corp. Name: Internal Address: S. H. Dworetsky P.O. Box 4110 Middletown, New Jersey 07748 Additional name(s) of conveying party(ies) attached? ☐ Yes ⋈ No Street Address: 32 Avenue of the Americas 3. Nature of Conveyance: ☐ Merger New York State: NY ZIP: 10013-2412 ☐ Security Agreement ☐ Change of Name ☐ Other December 10, 1999 Additional name(s) & address(es) attached? ☐ Yes ⋈ No Execution Date: Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: December 23, 1999 B. Patent No.(s) A. Patent Application No.(s) Additional numbers attached? ☐ Yes ☒ No 5. Name and address of party to whom correspondence concerning 6. Total number of applications and patents involved: document should be mailed: 7. Total fee (37 CFR 3.41)..... \$40.00 James A. Oliff Name: ☐ Enclosed Internal Address: Authorized to be charged to deposit account 277 S. Washington Street, Suite 500 Street Address: Alexandria, Virginia 22314 8. Deposit account number: 15-0461 (Attach duplicate copy of this page if paying by deposit account) Middletown State: NJ ZIP: 07748 City: 01/11/2000 DCDATES 00000126 150461 09471391 DO NOT USE THIS SPACE 40.00 CH 01 Ft:581 Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

> Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks, Box Assignments

Total number of pages including cover sheet, attachments, and document: 3

PATENT REEL: 010479 FRAME: 0195

December 23, 1999

James A. Oliff, Reg. No. 27,075 Christine M. Hoeft, Reg. No. 41,844

ASSIGNMENT AND AGREEMENT

For value received, I, Cederic Fung Lam, of Middletown in the County of Monmouth and State of New Jersey, hereby sell, assign and transfer to AT&T Corp., a corporation of the State of New York, having an office at 32 Avenue of the Americas, New York, New York 10013-2412, U.S.A., and its successors, assigns and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to METHOD AND SYSTEM FOR DELIVERING MULTI-BAND BROADCAST SERVICES IN WAVELENGTH DIVISION MULTIPLEXED PASSIVE OPTICAL NETWORKS described in an application for Letters Patent of the United States, executed by me of even date herewith, and all the rights and privileges in said application and under any and all Letters Patent that may be granted in the United States for said inventions; and I also concurrently hereby sell, assign and transfer to AT&T Corp. the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

I authorize AT&T Corp. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from me, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of AT&T Corp. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

I request that any and all patents for said inventions be issued to AT&T Corp. in the United States and in all countries foreign to the United States, or to such nominees as AT&T Corp. may designate.

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I agree that, when requested, I shall, without charge to AT&T Corp. but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

Cederic Fong Lam

Date: (2/10/99

United States of America)

State of New Jersey)ss: 603-76-6247

County of Mon mouth

RECORDED: 12/23/1999

On this 10H day of Dec, 1999, before me personally came Cedric Fung Lam, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Notary Public

DEBRA S. MEYERS

Notary Public of New Jersey

Commission Expires 10/07/2003