I I I I I I I I I I	Q73425
Form PTO-1595 (modified)	SHEET U.S. DEPARTMENT OF COMMERCE
(Rev. 03/01)	U.S. Patent and Trademark Office
OMB No. 0651-0027 To the Honorable Commissioner of Falents and	2337340 attached original documents or copy thereof.
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
Philippe ANTOINE	ALCATEL 2
François DERYCK	54, rue La Boetie
Pieter GEERAERTS	75008 Paris, FRANCE
Thierry POLLET	~~ % ~~
Luc VANDENDORPE	
Additional name(s) of conveying party(ies) attached? Yes	M_{N_0}
3. Nature of conveyance:	- 10
☑ Assignment ☐ Merger	
☐ Security Agreement ☐ Change of Name	
☐ Other	
Execution Date: December 2, 2002	Additional name(s) & address(es) attached? ☐ Yes ☑ No
4. 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 2, 2002
A. Patent Application No.(s)	B. Patent No.(s)
, i. Tutone Application For(s)	1023 1.01
1111	mbers attached? Tyes VNo. 1033 Levis
Additional numbers attached: Li 108 Li 100	
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
SUGHRUE MION, PLLC	7. Total fee (37 CFR 3.41): \$40.00
	✓ Enclosed.
WASHINGTON OFFICE	Authorized to be charged to Deposit Account No. 19-4880.
	The USPTO is directed and authorized to charge all required
	fees, except for the Issue Fee and the Publication Fee, to Deposit
23373	Account No. 19-4880. Please also credit any overpayments to said
PATENT TRADEMARK OFFICE	Deposit Account.
	8. Deposit Account Number:
	19-4880
700	(Attach duplicate copy of this page if paying by deposit account)
DO NOT USE THIS SPACE	
9. 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.	
(cy/lal-	January 6, 2003
David J. Cushing Re	eg. No. 28,703 Date
Total number of pages including cover sheet, attachments, and documents: 2	
Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks	
Box Assignment	
Washington, D.C. 20231	

Q1/13/2003 LMUELLER 00000132 10336815

01 FC:8021

40.00 OP

PATENT REEL: 013644 FRAME: 0960

Assignment

Whereas, I/We, Philippe ANTOINE, Thierry POLLET, Francois Alain Roger DERYCK, Luc VANDENDORPE and Pieter GEERAETS of Walhain, Mechelen, Walhain-Saint-Paul, Louvain-La-Neuve and St-Martens-Latem, all in Belgium, hereinafter called assignor(s), have invented certain improvements in "Optimised Bit Allocation Adapted for VDSL"

and executed an application for Letters Patent of the United States of America therefor on _____; and Whereas. ALCATEL 54, rue La Boétie 75008 PARIS France (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor; Now therefore, for valuable consideration, receipt whereof is hereby acknowledged, I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director - U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses and Confirmation number (Application number _____ , filed _____) the filing date and application number of said application when known. 12/2/2002 Philippe ANTOINE.

s/Philippe ANTOINE Date: THIERRY POLLET Date: 12/2/2002 FRANCOIS DERYCK Date: 12/2/2002 s/François Alain Roger DERYCK S/Luc VANDENDORPE
PIETER GEERAERIS

PIETER GEERAERIS 12/2/2002 Date: 12/2/2002 Date: s/Pieter GEERAERTS

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)

RECORDED: 01/06/2003

PATENT REEL: 013644 FRAME: 0961