

09-10-2003

Form PTO-1595  
(Rev. 03/01)



U.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

OMB No. 0651-0027 (exp. 5/31/2002)

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To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

9.803

Com21, Inc.  
750 Tasman Drive  
Milpitas, CA 95035

2. Name and address of receiving party(ies)

Name: ARRIS International, Inc.

Internal Address: \_\_\_\_\_

Additional name(s) of conveying party(ies) attached?  Yes  No

3. Nature of conveyance:

- Assignment  Merger
- Security Agreement  Change of Name
- Other \_\_\_\_\_

Street Address: 11450 Technology Circle

City: Duluth State: GA Zip: 30097

Execution Date: 8/18/2003

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: \_\_\_\_\_

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached?  Yes  No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: John L. Doughty

Internal Address: \_\_\_\_\_

Street Address: 11450 Technology Circle

City: Duluth State: GA Zip: 30097

6. Total number of applications and patents involved: 34

7. Total fee (37 CFR 3.41).....\$ 1,360

Enclosed

Authorized to be charged to deposit account

8. Deposit account number: 01-2125

(Attach duplicate copy of this page if paying by deposit account)

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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.*

John L. Doughty

Name of Person Signing

John L. Doughty  
Signature

9/4/2003

Date

Total number of pages including cover sheet, attachments, and documents: 8

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

09/09/2003 LABELLER 00000195 012125 5421030

01 FC10021 1360.00 DA

PATENT  
REEL: 014462 FRAME: 0093

**Recordation Form cover Sheet  
Continuation of Item 4**

<b>Serial Number</b>	<b>Filing Date</b>	<b>Patent Number</b>	<b>Date of Issue</b>
761281	09/17/91	5,421,030	05/30/1995
		5,421,030	05/30/1995
949424	09/22/92	5,341,415	08/23/1994
336325	11/08/94	5,544,164	08/06/1996
"000373"	01/04/93	5,425,027	06/13/1995
328583	10/17/94	5,642,351	06/24/1997
877906	06/18/97	5,870,395	02/09/1999
323341	10/14/94	5,550,820	08/27/1996
843111	04/24/97	5,926,479	07/20/1999
699888	08/15/96	6,094,211	07/25/2000
731958	10/23/96	6,028,860	02/22/2000
2,265,842	06/30/97		
09/315,783	05/20/99		
97933242.6	06/30/97		
519332/1998	06/30/97		
US97/11476	06/30/97		
08/811,186	03/04/97		
US98/03718	02/25/98		
810407	03/04/97	5,870,134	02/09/1999
130842	08/07/98	6,075,972	6/13/2000 *subject to terminal disclaimer
US98/04026	03/02/98		
08/864,550	05/27/97		

<b>Serial Number</b>	<b>Filing Date</b>	<b>Patent Number</b>	<b>Date of Issue</b>
09/398,267	09/17/99		
09/397,997	09/17/99		
09/400,203	09/17/99		
US98/19327	09/16/98		
881942	06/25/97	<b>6,081,533</b>	06/27/2000
US98/12972	06/23/98		
985571	12/05/97	<b>6,137,793</b>	10/24/2000
US98/20384	09/30/98		
631507	04/12/96	<b>5,917,822</b> (share w/ Xerox & PacTel)	06/29/1999
892090	07/14/97	<b>6,049,693</b>	04/11/2000
09/526,077	03/15/00		
09/594,216	06/14/00		

## ASSIGNMENT OF PATENTS

WHEREAS, Com21, INC., a Delaware corporation, having a place of business at 750 Tasman Drive, Milpitas, CA 95035, hereinafter referred to as ASSIGNOR, owns all right, title, and interest in the following U. S. patents:

Title	Serial Number	Filing Date	Patent Number	Date of Issue	Inventors
Communications System and Method for Bi-directional Communications Between an Upstream Control Facility and Downstream User Terminals	761281	09/17/91	5,421,030	05/30/1995	Paul Baran
Continuation patent			5,421,030	05/30/1995	Paul Baran
Method and Apparatus for Sharing Of Common In-House Wiring To Permit Multiple Telephone Carriers To Serve The Same Customer	949424	09/22/92	5,341,415	08/23/1994	Paul Baran
Method and Cell Based Wide Area Network Alternative Access Telephone Data System	336325	11/08/94	5,544,164	08/06/1996	Paul Baran
Wide Area Fiber And TV Cable Fast Packet Cell Network	"000373"	01/04/93	5,425,027	06/13/1995	Paul Baran
Wide Area Fiber And TV Cable Fast Packet Cell Network	328583	10/17/94	5,642,351	06/24/1997	Paul Baran
Wide Area Fiber And TV Cable Fast Packet Cell Network	877906	06/18/97	5,870,395	02/09/1999	Paul Baran
Multiple Protocol Personal Communications Network System	323341	10/14/94	5,550,820	08/27/1996	Paul Baran
Multiple Protocol Personal Communications Network System	843111	04/24/97	5,926,479	07/20/1999	Paul Baran
TV and Data Cable System Ingress Noise Blocker	699888	08/15/96	6,094,211	07/25/2000	Paul Baran George Bunya Marshall Hollimon
Prioritized Virtual Connection Transmissions In A Packet To ATM Cell Cable Network	731958	10/23/96	6,028,860	02/22/2000	Mark Laubach, Sanford Helton Alireza Raissinia Paul Gordon Michael Sabin Malay Thaker Kathleen Nichols
Prioritized Virtual Connection Transmissions In A Packet To ATM Cell Cable Network	2,265,842	06/30/97			Mark Laubach Sanford Helton Alireza Raissinia Paul Gordon Michael Sabin Malay Thaker Kathleen Nichols

Prioritized Virtual Connection Transmissions In A Packet To ATM Cell Cable Network	09/315,783	05/20/99			Mark Laubach Sanford Helton Alireza Raissinia Paul Gordon Michael Sabin Malay Thaker Kathleen Nichols
Virtual Connection Transmissions In A Packet To ATM Cable Network	97933242.6	06/30/97			Mark Laubach Sanford Helton Alireza Raissinia Paul Gordon Michael Sabin Malay Thaker Kathleen Nichols
Virtual Connection Transmissions In A Packet To ATM Cable Network	519332/1998	06/30/97			
Virtual Connection Transmissions In A Packet To ATM Cable Network	US97/11476	06/30/97			Mark Laubach Sanford Helton Alireza Raissinia Paul Gordon Michael Sabin Malay Thaker Kathleen Nichols
Conversion Of A Cable Modem Signal To Different Frequencies For Upstream Communications Having A Wireless Channel Segment	08/811,186	03/04/97			
Wireless Upstream Communications Using Frequency Conversion	US98/03718	02/25/98			
CATV Network And Cable Modem System Having A Wireless Return Path	810407	03/04/97	5,870,134	02/09/1999	Paul Baran Mark Laubach
CATV Network And Cable Modem System Having A Wireless Return Path	130842	08/07/98	6,075,972	6/13/2000 *subject to terminal disclaimer	Paul Baran Mark Laubach
CATV Network And Cable Modem System Having A Wireless Return Path	US98/04026	03/02/98			
Multi-Channel Support For Virtual Private Networks In A Packet To ATM Cell Cable System	08/864,550	05/27/97			Mark Laubach Sanford Helton Alireza Raissinia Paul Gordon Malay Thaker Kathleen Nichols

Multi-Channel Support For Virtual Private Networks In A Packet To ATM Cell Cable System	09/398,267	09/17/99			Mark Laubach Sanford Helton Alirezza Raissinia Paul Gordon Malay Thaker Kathleen Nichols
Multi-Channel Support For Virtual Private Networks In A Packet To ATM Cell Cable System	09/397,997	09/17/99			Mark Laubach Sanford Helton Alirezza Raissinia Paul Gordon Malay Thaker Kathleen Nichols
Multi-Channel Support For Virtual Private Networks In A Packet To ATM Cell Cable System	09/400,203	09/17/99			Mark Laubach Sanford Helton Alirezza Raissinia Paul Gordon Malay Thaker Kathleen Nichols
Multi-Channel Support For Virtual Private Networks In A Packet To ATM Cable System	US98/19327	09/16/98			
Method And Apparatus For An Application Interface Module In A Subscriber Terminal Unit	881942	06/25/97	6,081,533	06/27/2000	Paul Baran Ken Gorman Sanford Helton Mark Laubach
Application Interface Module	US98/12972	06/23/98			
Reverse Path Multiplexer For Use In High Speed Data Transmissions	985571	12/05/97	6,137,793	10/24/2000	Ken Gorman Mark Laubach Ali Raissinia
Reverse Path Multiplexer For Use In High Speed Data Transmissions	US98/20384	09/30/98			
Method For Providing Intrgrated Packet Services Over A Shared Media Network	631507	04/12/96	5,917,822 (share w/ Xerox & PacTel)	06/29/1999	Mark Laubach (Com21) Joseph Lyles (Xerox) Scott Quinn (PacTel)
Upstream Ingress Noise Blocking Filter For Cable Television System	892090	07/14/97	6,049,693	04/11/2000	Paul Baran George Bunya Jud Heinzman Marshall Hollimon
Upstream Ingress Noise Blocking System Filter For Cable Television System	09/526,077	03/15/00			Paul Baran George Bunya Jud Heinzman Marshall Hollimon

Method And Apparatus For Sub- Network Devices Without Direct Layer- 2 Communication and Coupled to a Common Forwarding Agent Interface to Communicate Through Layer-3	09/594,216	06/14/00			Randall Wayne Frei
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WHEREAS, ARRIS International, Inc., a Delaware corporation, having a place of business at 11450 Technology Circle, Duluth, Georgia 30097, hereinafter referred to as ASSIGNEE, is desirous of acquiring ASSIGNOR'S interest in and to said U.S. patents and any provisional, continuation, continuation-in-part, divisional, reissued, re-examined, and foreign applications and patents relating to any of said U.S. patents.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by ASSIGNOR, ASSIGNOR has sold, assigned and transferred and does hereby sell, assign and transfer unto ASSIGNEE, and ASSIGNEE'S successors and assigns, (a) the entire right, title and interest, for the United States of America, in and to said U.S. patents and all the rights and privileges in any application and under any and all patents that may be granted in the U.S. for any invention(s) described in any of said patents, including but not limited to, all corresponding provisional, continuation, continuation-in-part, divisional, reissue, and reexamination applications; and (b) the entire right, title and interest in and to any and all foreign patents and applications for any invention described in any of said U.S. patents, in any and all countries foreign to the U.S., including all rights of priority arising from them, and all the rights and privileges under any and all forms of protection, including patents, that may be granted in said countries foreign to the U.S. for them; and (c) the right to seek remedies for any and all infringements of any of the foregoing patents and to collect and retain all damages and profits and enjoy any and all remedies granted for infringements.

ASSIGNOR authorizes ASSIGNEE to make any and all application for such protection in its own name and maintain such protection in any and all countries foreign to the U.S., and to invoke and claim for any application for patent or other form of protection for any said invention, without further authorization from ASSIGNOR, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

ASSIGNOR hereby consents 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 ASSIGNEE to apply for protection for any invention described in any of said U.S. patents or other form of protection for any said invention and to claim the aforesaid benefit of the right of priority.

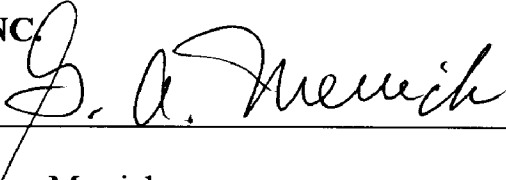
ASSIGNOR requests that any and all patents for any said invention be issued to ASSIGNEE in all countries foreign to the U.S., or to such nominee as ASSIGNEE may designate.

ASSIGNOR covenants and agrees that, when requested, ASSIGNOR shall, without charge to ASSIGNEE but at ASSIGNEE'S expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable, or convenient in connection with patent applications, patents, or

other forms of protection of any said invention, and for the defense and protection thereof if challenged in the court of law.

**COM21, INC.**

By: \_\_\_\_\_



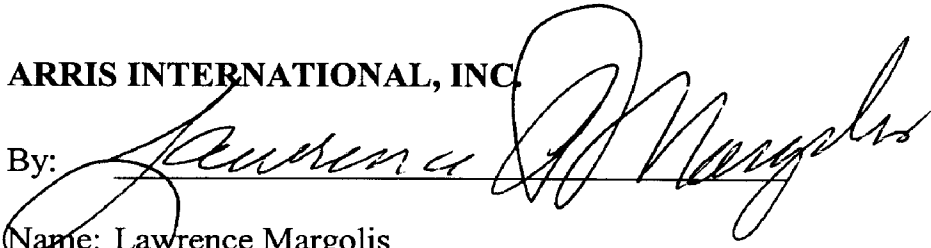
Name: George Merrick

Title: CEO

Date: August \_\_, 2003

**ARRIS INTERNATIONAL, INC.**

By: \_\_\_\_\_



Name: Lawrence Margolis

Title: Exec. VP, CFO & Secretary

Date: August \_\_, 2003