07-02-2002 U.S. DEPARTMENT OF COMMERCE Form **PTO-1595** U.S. Patent and Trademark C (Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002) Tab settings ⇒⇒⇒ ▼ 102143497 To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy them 2. Name and address of receiving party(ies) Name of conveying party(ies): Steven G. Smith, Roland T. Morton, Jr., Name: BellSouth Intellectual Property Corporation Robert H. Willis, Jr. and Mitchell E. Davis Internal Address: Additional name(s) of conveying party(ies) attached? ☐ Yes SNo 3. Nature of conveyance: ☑ Assignment Merger Change of Name Street Address:824 Market Street, Suite 901 ☐ Security Agreement □ Other _ City: Wilmington State: DE Zip:19801 Execution Date: June 18, 2002, May 31, 2002, June 4, 2002 and June 12, 2002 Additional name(s) and 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: June 20, 2002 A. Patent Application No.(s) B. Patent No.(s) Additional number(s) attached?

Yes 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: L concerning document should be mailed. 7. Total fee (37 CFR 3.41) \$40.00 Name: Michael D. Lazzara, Esq. ☒ Enclosed Internal Address: Kirkpatrick & Lockhart LLP ☐ Authorized to be charged to deposit account Henry W. Oliver Building 8. Deposit account number: Street Address: 535 Smithfield Street

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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.

Michael D. Lazzara

Name of Person Signing

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City: Pittsburgh State: PA Zip:15222-2312

PI-867239 v1 0224285-0179

| Attorney's Docket No. <u>010285</u> | PATENT |
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| | For: ☑ U.S. and/or ☑ Foreign Rights For: ☑ U.S. Application or ☐ U.S. Provisional Application For: ☐ U.S. Patent For: ☐ PCT Application By: Multiple Inventors |
| ASSIGNMENT OF INVE | ENTION (MULTIPLE INVENTORS) |
| In consideration of the payment by ASSIGN receipt of which is hereby acknowledged, and fo | EE to ASSIGNOR of the sum of One Dollar (\$1.00), the or other good and valuable consideration, |
| ASSIGNORS (Inventors): | |
| Steven G. Smith (type or print name of inventors) | 530 Wexford Hollow Run Roswell, GA 30075 USA Address Nationality |
| Roland T. Morton, Jr. | 10570 Tuxford Drive Alpharetta, GA 30022 USA |
| Robert H. Willis, Jr. | 8906 Largo Court Louisville, KY 40299 USA |
| Mitchell E. Davis | 10195 Rivertown Road Palmetto, GA 30268 USA |
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(Assignment of Invention-Multiple Inventors [16-3.2]-page 1 of 1)

| ASSIGNEE: | |
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| BellSouth Intellectual Property Corporation (type or print name of ASSIGNEE) | 824 Market Street, Suite 510 Address |
| (a Delaware corporation) Nationality | Wilmington, DE 19801 |
| and the successors, assigns and legal representatives o | of the ASSIGNEE |
| (complete one of the | he following) |
| ★ the entire right, title and interest | |
| an undivided percent (_ and its territorial possessions | %) interest for the United States |
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| and in all foreign countries, including all improvements which are disclosed in the invention entitle PROMOTING AUTHENTICATION OF TECHNICAL SEITELECOMMUNICATIONS SYSTEM | |
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| and which is found in | |
| (a) U.S. patent application executed on even da | ate herewith |
| (b) U.S. patent application executed on | |
| (c) U.S. provisional application naming the above | ve inventor(s) for the above-entitled invention |
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(Assignment of Invention-Multiple Inventors [16-3.2]-page 2 of 2)

| (g) and any legal equivalent thereof in a and to, all Letters Patent to be ob continuation, division, renewal, or su examination thereof. | a foreign country, including the right to cl tained for said invention by the above ubstitute thereof, and as to letters patent | application or any |
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| Roland T. Morton, Jr. type name of Inventor) | Signature of INVENTOR | D-4- |
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| Robert H. Willis, Jr. | | |
| type name of Inventor) | Signature of INVENTOR | Date |
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(Assignment of Invention-Multiple Inventors [16-3.2]-page 3 of 3)

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Notary Public, DeKalb County, Georgia My Commission Expires July 13, 2003

| ttorney's Docket No. <u>010285</u> | PATEN |
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| | For: ☑ U.S. and/or ☑ Foreign Rights For: ☑ U.S. Application or ☐ U.S. Provisional Application For: ☐ U.S. Patent For: ☐ PCT Application By: Multiple Inventors |
| ASSIGNMENT OF INV | ENTION (MULTIPLE INVENTORS) |
| In consideration of the payment by ASSIGI ceipt of which is hereby acknowledged, and t | NEE to ASSIGNOR of the sum of One Dollar (\$1.00), the for other good and valuable consideration, |
| SSIGNORS (Inventors): | |
| even G. Smith (type or print name of inventors) | 530 Wexford Hollow Run Roswell, GA 30075 Address Nationality |
| oland T. Morton, Jr. | 10570 Tuxford Drive Alpharetta, GA 30022 USA |
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| itchell E. Davis | 10195 Rivertown Road Palmetto, GA 30268 USA |
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(Assignment of Invention-Multiple Inventors [16-3.2]-page 1 of 4)

| ASSIGNEE: | |
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| BellSouth Intellectual Property Corporation (type or print name of ASSIGNEE) | 824 Market Street, Suite 510 Address |
| (a Delaware corporation) Nationality | Wilmington, DE 19801 |
| and the successors, assigns and legal representatives of | of the ASSIGNEE |
| (complete one of t | the following) |
| ★ the entire right, title and interest | |
| an undivided percent (and its territorial possessions | %) interest for the United States |
| (check the following box, if foreign | rights are also to be assigned) |
| and in all foreign countries, including all improvements which are disclosed in the invention entitl PROMOTING AUTHENTICATION OF TECHNICAL SETELECOMMUNICATIONS SYSTEM | |
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| (b) U.S. patent application executed on | |
| (c) U.S. provisional application naming the abo | ve inventor(s) for the above-entitled invention |
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| | of this assignment, I, an ASSIGNOR signing below, by to insert below the filing date and application |
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(Assignment of Invention-Multiple Inventors [16-3.2]-page 2 of 4)

PATENT REEL: 013032 FRAME: 0007

| (g) | \boxtimes | and any legal equivalent thereof in a foreign country, including the right to claim priority and, in |
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| | | and to, all Letters Patent to be obtained for said invention by the above application or any |
| | | continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re- |
| | | examination thereof. |

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

| IN WITNESS WHEREOF, We have | To barne out haire and odd the | Date of signing |
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| WARNING: The date of signing must be the sam | e as the date of execution of the application, if item (a) v | vas checked above. |
| Steven G. Smith | | |
| (type name of Inventor) | Signature of INVENTOR | Date |
| Roland T. Morton, Jr. | - Alla | 5/3/0- |
| (type name of Inventor) | Signature of INVENTOR | * Øate |
| Robert H. Willis, Jr. | | |
| (type name of Inventor) | Signature of INVENTOR | Date |
| Mitchell E. Davis | | |
| (type name of Inventor) | Signature of INVENTOR | Date |
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(Assignment of Invention-Multiple Inventors [16-3.2]-page 3 of 4)

NOTARIZATION OR LEGALIZATION ACCOMPANYING ASSIGNMENT

| NOTE: | Executing this page is not required fo 35 USC 261. | r assignment and is on | ly prima facie evidence of execution, |
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(Assignment of Invention-Multiple Inventors [16-3.2]-page 4 of 4)

Notary Public, DeKalb County, Georgia My Commission Expires July 13, 2003

| Attorney's Docket No. <u>010285</u> | | | PATENT |
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| | For: 🛛 U.S. A | Provisional Application Patent Application | |
| ASSIGNMENT OF INV | ENTION (MULTI | PLE INVENTORS) |) |
| In consideration of the payment by ASSIGN receipt of which is hereby acknowledged, and for | | | |
| ASSIGNORS (Inventors): | | | |
| Steven G. Smith (type or print name of inventors) | | exford Hollow Run | USA Nationality |
| Roland T. Morton, Jr. | | Tuxford Drive retta, GA 30022 | USA |
| Robert H. Willis, Jr. | | .argo Court ille, KY 40299 | USA |
| Mitchell E. Davis | | Rivertown Road tto, GA 30268 | USA |
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(Assignment of Invention-Multiple Inventors [16-3.2]-page 1 of 4)

| ASSIGNEE: | |
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| BellSouth Intellectual Property Corporation (type or print name of ASSIGNEE) | 824 Market Street, Suite 510 Address |
| (a Delaware corporation) Nationality | Wilmington, DE 19801 |
| and the successors, assigns and legal representatives | of the ASSIGNEE |
| (complete one of | the following) |
| ★ the entire right, title and interest | |
| an undivided percent (| %) interest for the United States |
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| and in all foreign countries, including a improvements which are disclosed in the invention entiperormoral PROMOTING AUTHENTICATION OF TECHNICAL STELECOMMUNICATIONS SYSTEM | |
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(Assignment of Invention–Multiple Inventors [16-3.2]-page 2 of 4)

| (g) | \boxtimes | and any legal equivalent thereof in a foreign country, including the right to claim priority and, in |
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| | | and to, all Letters Patent to be obtained for said invention by the above application or any |
| | | continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re- |
| | | examination thereof. |

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

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| IN WITNESS WHEREOF, We have | Therearity set right and sour time | Date of signing |
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| WARNING: The date of signing must be the sar | me as the date of execution of the application, if item (a) wa | s checked above. |
| Steven G. Smith (type name of Inventor) | Signature of INVENTOR | Date |
| Poland T. Morton, Ir | | |
| Roland T. Morton, Jr. (type name of Inventor) | Signature of INVENTOR | Date |
| Robert H. Willis, Jr. (type name of Inventor) | Signature of INVENTOR | 6-4-02 Date |
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| Mitchell E. Davis (type name of Inventor) | Signature of INVENTOR | Date |
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(Assignment of Invention-Multiple Inventors [16-3.2]-page 3 of 4)

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| Attorney's Docket No. <u>010285</u> | PATENT |
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| | For: ☑ U.S. and/or ☑ Foreign Rights For: ☑ U.S. Application or ☐ U.S. Provisional Application For: ☐ U.S. Patent For: ☐ PCT Application By: Multiple Inventors |
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| In consideration of the payment by ASSIGNi receipt of which is hereby acknowledged, and fo ASSIGNORS (Inventors): | EEE to ASSIGNOR of the sum of One Dollar (\$1.00), the or other good and valuable consideration, |
| Steven G. Smith (type or print name of inventors) | 530 Wexford Hollow Run Roswell, GA 30075 Address Nationality |
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| Express mail label no.: | | | |
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(Assignment of Invention-Multiple Inventors [16-3.2]-page 2 of 4)

| (g) and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or reexamination thereof. | | | | |
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| IN WITNESS WHEREOF, We have hereunto set | hand and seal this | | | |
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| Steven G. Smith | | | | |
| type name of Inventor) | Signature of INVENTOR | Date | | |
| Roland T. Morton, Jr. | | | | |
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(Assignment of Invention-Multiple Inventors [16-3.2]-page 3 of 4)

RECORDED: 06/20/2002

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Notary Public, DeKalb County, Georgia My Commission Expires July 13, 2003

(Assignment of Invention-Multiple Inventors [16-3.2]-page 4 of 4)