PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Mark J. Dapper	01/27/1997
Michael J. Geile	01/22/1997
Terrance J. Hill	01/23/1997
Harold A. Roberts	01/21/1997
Brian D. Anderson	01/24/1997
Jeffrey Brede	01/22/1997
Mark S. Wadman	01/30/1997
Robert J. Kirscht	01/21/1997
James J. Herrmann	01/23/1997
Michael J. Fort	01/22/1997
Steven P. Buska	01/22/1997
Jeff Solum	01/21/1997
Debra Lea Enfield	05/05/1997
Darrell Berg	01/21/1997
Thomas Smigelski	01/30/1997
Thomas C. Tucker	01/27/1997
Joe Hall	01/31/1997
John M. Logajan	01/22/1997
Somvay Boualouang	01/22/1997
Heng Lou	01/22/1997
Mark D. Elpers	01/21/1997
Matt Downs	01/21/1997
Tammy Ferris	01/21/1997
Adam Opoczynski	01/24/1997
David S. Russell	01/22/1997
Calvin G. Nelson	05/22/1997
Niranjan R. Samant	01/23/1997
Joseph F. Chiappetta	01/23/1997
Scott Sarnikowski	05/22/1997

PATENT REEL: 022071 FRAME: 0612

500748504

RECEIVING PARTY DATA

Name:	ADC Telecommunications, Inc.
Street Address:	4900 West 78th Street
City:	Bloomington
State/Country:	MINNESOTA
Postal Code:	55435

PROPERTY NUMBERS Total: 21

Property Type	Number
Application Number:	11736324
Application Number:	12272522
Application Number:	12272529
Application Number:	12272530
Application Number:	12272535
Application Number:	12272542
Application Number:	12272546
Application Number:	11746823
Patent Number:	7436812
Application Number:	11686808
Application Number:	11734064
Patent Number:	7440391
Application Number:	11746407
Application Number:	11747577
Application Number:	11734075
Application Number:	11736305
Application Number:	11734686
Application Number:	11763188
Application Number:	11747033
Application Number:	11736915
Application Number:	11749305

CORRESPONDENCE DATA

Fax Number: (952)465-0771

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 952-465-0770

Email: docketing@fogglaw.com

Correspondent Name: Fogg & Powers LLC
Address Line 1: 5810 W. 78th St

Address Line 2: Ste 100

Address Line 4: Minneapolis, MINNESOTA 55439

ATTORNEY DOCKET NUMBER: 100.070MI01

NAME OF SUBMITTER: Julia M. Sisterman

Total Attachments: 105

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ASSIGNMENT

WHEREAS, WE, Mark J. Dapper, residing at 6558 Baywood Lane, Cincinnati, OH 45224, and Michael J. Geile, residing at 316 Miami Valley Drive, Loveland, OH 45140, and Terrance J. Hill, residing at 1765 Garrett House Lane, Fairfield, OH 45014, and Harold A. Roberts, residing at 7017 Beacon Circle, Eden Prairie, MN 55346, and Brian D. Anderson, residing at 11430 - 50th Place North, Plymouth, MN 55442, and Jeffrey Brede, residing at 8073 Curtis Lane, Eden Prairie, MN 55347, and Mark S. Wadman, residing at 8956 Braxton Drive, Eden Prairie, MN 55347, and Robert J. Kirscht, residing at 13106 Vernon Avenue South, Savage, MN 55378, and James J. Herrmann, residing at 1894 Sunrise Court, Eagan. MN 55122, and Michael J. Fort, residing at 1045 Northview Park, Eagan, MN 55123, and Steven P. Buska, residing at 13370 Stanton Drive, Minnetonka, MN 55305, and Jeff Solum. residing at 4900 West 78th Street, Bloomington, MN 55435, and Debra Lea Enfield, residing at 464 Ridge Court, Chaska, MN 55318, and Darrell Berg, residing at 4900 West 78th Street, Bloomington, MN 55435, and Thomas Smigelski, residing at 230 Waterford Drive, Lake Zurich, IL 60047, and Thomas C. Tucker, residing at 205 Silver Creek Trail, Chapel Hill, NC 27514, and Joe Hall, residing at 4900 West 78th Street, Bloomington, MN 55435, and John M. Logajan, residing at 4248 Hamline Avenue, Arden Hills, MN 55112, and Somvay Boualouang, residing at 4900 West 78th Street, Bloomington, MN 55435, and Heng Lou, residing at 4900 West 78th Street, Bloomington, MN 55435, and Mark D. Elpers, residing at 16303 205th Avenue NW, Elk River, MN 55330, and Matt Downs, residing at 4900 West 78th Street, Bloomington, MN 55435, and Tammy Ferris, residing at 4900 West 78th Street, Bloomington, MN 55435, and Adam Opoczynski, residing at 8911 Sylvan Ridge, Eden Prairie, MN 55347, and David S. Russell, residing at 5145 Luverne Avenue, Minneapolis, MN 55419, and Calvin G. Nelson, residing at 6070 Lake Virginia Drive So., Shorewood, MN 55331, and Niranjan R. Samant, residing at 229 Ridgefield Drive, Middletown, CT 06547, and Joseph F. Chiappetta, residing at 6 Ranch Drive, Trumbull, CT 06611, and Scott Sarnikowski, residing at 13235 57th Avenue North, Plymouth, MN 55442, made certain new and useful inventions and improvements for which We filed an application for Letters Patent of the United States on June 28, 1996, and was assigned US serial number 08/673,002, and is entitled COMMUNICATION SYSTEM WITH MULTICARRIER TELEPATHY TRANSPORT.

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AND WHEREAS, <u>ADC Telecommunications</u>, Inc., a corporation organized and existing under and by virtue of the laws of the State of <u>Minnesota</u>, and having an office and place of business at <u>4900 West 78th Street</u>, <u>Bloomington</u>, <u>MN 55435</u>, (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me/us and that full right to convey the same as herein expressed is possessed by us.

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Mark J. Dapper
STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared Mark J. Dapper to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public

Docket No.: 500.623US1 Serial No.: 08/673,002, Filing Date: June 28, 1996 Page 4 of 17

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Michael J. Geile
STATE OF)
COUNTY OF)
On this day of, 1996 before me personally appeared Michael J. Geile to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Terrance J. Hill STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Terrance J. Hill</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this 21 day of Jeans 1996. On this 21 day of Lang, 1996 before me personally appeared Harold A. Roberts to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forthemmen [SEAL] ty Commission Expires Jan. 31, 2000 ≸ Noftary Public IN TESTIMONY WHEREOF, I have hereunto set my hand this Lyday of January, 1996. day of January, 1996 before me personally appeared Brian D. Anderson to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

PATENT

REEL: 022071 FRAME: 0621

IN TESTIMONY WHEREOF, I have hereunto set my hand this 22 day of January, 1996.
STATE OF MINICIPAL ()
STATE OF Ministra) State OF Ministra Seffrey Breed: Seffrey
On this 22 day of January, 1996 before me personally appeared <u>Jeffrey Brede</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
KAREN S. FARAGO NOTARY PUBLIC-MINNESOTA SCOTT COUNTY AMOUNT STATEMENT STATEMENT STATEMENT SCOTT COUNTY
My Commission Expires Jan. 31, 2000 Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Mark S. Wadman
STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared Mark S. Wadman
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]

Notary Public

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Docket No.: 500.623US1 Serial No.: 08/673,002 Filing Date: June 28, 1996 Page 7 of 17 IN TESTIMONY WHEREOF, I have hereunto set my hand this 21 or day of Jan STATE OF Minusto)ss. COUNTY OF Henryen) On this 2 day of January, 1996 before me personally appeared Robert J. Kirscht to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and My Commission Expires Jan. 31, 2000 IN TESTIMONY WHEREOF, I have hereunto set my hand this $\frac{95}{2}$ day of J. Herrmai STATE OF 1/2 , 1996 before me personally appeared James J. Herrmann

On this 23 day of James J. Herrmann, 1996 before me personally appeared James J. Herrmann to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

[SEAL]

KAREN S. FARAGO
NOTARY PUBLIC-MINNESOTA
SCOTT COUNTY
Ny Commission Expires Jan. 31, 2000

PATENT

REEL: 022071 FRAME: 0623

Docket No.: 500.623US1 Serial No.: 08/673,002 Filing Date: June 28, 1996 Page 8 of 17 IN TESTIMONY WHEREOF, I have hereunto set my hand this 22 STATE OF Minnesto _, 1996 before me personally appeared Michael J. Fort to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth. IN TESTIMONY WHEREOF, I have hereunto set my hand this 22 day of January 1996. STATE OF anuly, 1996 before me personally appeared Steven P. Buska to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth. [SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this 21 day of January 1996.
Mall Notes
IN TESTIMONY WHEREOF, I have hereunto set my band this 2/ day of January, 1996. Jeff Solum Jeff Solum STATE OF Municipal SSS. COUNTY OF January Jeff Solum Jeff Solum
On this 21 day of January, 1996 before me personally appeared <u>Jeff Solum</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therem: KAREN S. FARAGO NOTARY PUBLIC-MINNESOTA SCOTT COUNTY My Commission Expires Jan. 31, 2000
My Commission Expires Jan. 31, 2000 Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Debra Lea Enfield
STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Debra Lea Enfield</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]

Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Darrell Berg
STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Darrell Berg</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL]
Notary Public .
IN TESTIMONY WHEREOF, I have hereunto set my hand this 30 day of James, 1996. Thomas Smigelski STATE OF IL.) Ss. COUNTY OF COOK)
On this 30 day of January, 1996 before me personally appeared Thomas Smigelski
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
MOTIVATE AND THE TOTAL PROPERTY OF BLUMBER AND COMMISSION FOR THE PROPERTY OF BROAD FOR THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROP

IN TESTIMONY WHEREOF, I have her	reunto set my hand this 2 day of January 1996. Darrell Berg
,	Oauflé. Beral
STATE OF Minista	Darrett Berg
STATE OF Municota))ss. COUNTY OF Enrife)	
	before me personally appeared <u>Darrell Berg</u> to me
known and known to me to be the person des	cribed in and who executed the foregoing instrument,
KAREN S. FARAGO E	she executed the same for the uses and purposes Notary Public
M. COBIBITISHOUS Extrust one: a1' each 2	Men J. Farogo
Terror and a second sec	Notary Public / (/
IN TESTIMONY WHEREOF, I have he	ereunto set my hand this day of, 1996.
	Thomas Smigelski
STATE OF)	
)ss. COUNTY OF)	
On this day of, 19	96 before me personally appeared <u>Thomas Smigelski</u>
to me known and known to me to be the pers	son described in and who executed the foregoing
instrument, and he/she duly acknowledged to	o me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	
	Notary Public

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IN TESTIMONY WHEREOF, I hav	e hereunto set my hand this day of, 1996.
	Thomas C. Tucker
STATE OF)	
)ss.	
COUNTY OF)	
On this day of,	1996 before me personally appeared <u>Thomas C. Tucker</u>
to me known and known to me to be the	person described in and who executed the foregoing
instrument, and he/she duly acknowledge	ed to me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	
	Notary Public
A A A A A A A A A A A A A A A A A A A	
IN TESTIMONY WHEREOF, I have	Joe Hall
STATE OF Minnesta	Joe Hall
STATE OF Mennista))ss., COUNTY OF Mennistan	
On this 21 day of January	, 1996 before me personally appeared <u>Joe Hall</u> to me
known and known to me to be the person	n described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that	at he/she executed the same for the uses and purposes
therein set forth.	
[SEAL]	Jaren S. Farago
	Notary Public
ACO & COARDER STORY	
My Commission Explicit Auto, 2000 \$	

Docket No.: 500.623US1 Serial No.: 08/673,002 Filing Date: June 28, 1996 Page 12 of 17 IN TESTIMONY WHEREOF, I have hereun jo/set my hand this Day of JAN STATE OF / COUNTY OF annaly, 1996 before me personally appeared John M. Logajan to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and [SEAL IN TESTIMONY WHEREOF, I have hereunto set my hand this 22 day of Jan STATE OF ~ 1996 before me personally appeared Somvay Boualouang to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the

uses and purposes therein set forth.

My Commission Expires Jan. 31, 2000

[SEAL]

Docket No.: 500.623US1 Serial No.: 08/673,002 Filing Date: June 28, 1996 Page 13 of 17 IN TESTIMONY WHEREOF, I have hereunto set my hand this 2 day of Heng Lou STATE OF COUNTY OF anuly, 1996 before me personally appeared Heng Lou to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes KAREN S. FARAGO therein Notary Public IN TESTIMONY WHEREOF, I have hereunto set my hand this 21 day of Jean, 1996. STATE OF Minnesolo 1996 before me personally appeared Mark D. Elpers to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and

[SEAL]

KAREN S. FARAGO

purposes therein set forth.

NOTARY PUBLIC - MINNESOTA SCOTT COUNTY

My Commission Expires Jan. 31, 2000

^

Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this 21 day of Junary, 1998. STATE OF .)ss. COUNTY OF Hernigin) On this 21st day of January, 1996 before me personally appeared Matt Downs to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes mateliarithessessessesses JANEL S GOSS NOTARY PUBLIC - MINNESOTA **Notary Public** IN TESTIMONY WHEREOF, I have hereunto set my hand this ___ day of ______, 1996. Tammy Ferris STATE OF _____) COUNTY OF _____) On this ____ day of ______, 1996 before me personally appeared <u>Tammy Ferris</u> to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth. [SEAL]

Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Matt Downs
STATE OF)
)ss.
COUNTY OF)
On this day of, 1996 before me personally appeared Matt Downs to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of anway 1996. Tammy Ferris
STATE OF Minnesta
STATE OF Minnesta) State of Minnesta) State of Mennesta) State of Mennesta)
On this 21 day of Assurage, 1996 before me personally appeared Tammy Ferris to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
KAREN S. FARAGO Notary Public Notary Public
SCOTT COUNTY My Commission Expires Jan. 31, 2000

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Adam Opoczynski STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Adam Opoczynski</u> to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this 22 day of family, 1996. David S. Russell STATE OF Manual) SS. COUNTY OF Lessell
On this 22 day of January, 1996 before me personally appeared <u>David S. Russell</u> to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
SEAL KAREN S. FARAGO NOTARY PUBLIC-MINNESOTA SCOTT COUNTY Hy Commission Expires Jan. 31, 2000 Hy Commission Expires Jan. 31, 2000

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Calvin G. Nelson STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Calvin G. Nelson</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996. Niranjan R. Samant STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared Niranjan R. Samant to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Joseph F. Chiappetta
STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Joseph F.</u>
Chiappetta to me known and known to me to be the person described in and who executed the
foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the
uses and purposes therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996. Scott Sarnikowski STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Scott Sarnikowski</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public

ASSIGNMENT

WHEREAS, WE, Mark J. Dapper, residing at 6558 Baywood Lane, Cincinnati, OH 45224, and Michael J. Geile, residing at 316 Miami Valley Drive, Loveland, OH 45140, and Terrance J. Hill, residing at 1765 Garrett House Lane, Fairfield, OH 45014, and Harold A. Roberts, residing at 7017 Beacon Circle, Eden Prairie, MN 55346, and Brian D. Anderson, residing at 11430 - 50th Place North, Plymouth, MN 55442, and Jeffrey Brede, residing at 8073 Curtis Lane, Eden Prairie, MN 55347, and Mark S. Wadman, residing at 8956 Braxton Drive, Eden Prairie, MN 55347, and Robert J. Kirscht, residing at 13106 Vernon Avenue South, Savage, MN 55378, and James J. Herrmann, residing at 1894 Sunrise Court, Eagan, MN 55122, and Michael J. Fort, residing at 1045 Northview Park, Eagan, MN 55123, and Steven P. Buska, residing at 13370 Stanton Drive, Minnetonka, MN 55305, and Jeff Solum, residing at 4900 West 78th Street, Bloomington, MN 55435, and Debra Lea Enfield, residing at 464 Ridge Court, Chaska, MN 55318, and Darrell Berg, residing at 4900 West 78th Street, Bloomington, MN 55435, and Thomas Smigelski, residing at 230 Waterford Drive, Lake Zurich, IL 60047, and Thomas C. Tucker, residing at 205 Silver Creek Trail, Chapel Hill, NC 27514, and Joe Hall, residing at 4900 West 78th Street, Bloomington, MN 55435, and John M. Logajan, residing at 4248 Hamline Avenue, Arden Hills, MN 55112, and Somvay Boualouang, residing at 4900 West 78th Street, Bloomington, MN 55435, and Heng Lou, residing at 4900 West 78th Street, Bloomington, MN 55435, and Mark D. Elpers, residing at 16303 205th Avenue NW, Elk River, MN 55330, and Matt Downs, residing at 4900 West 78th Street, Bloomington, MN 55435, and Tammy Ferris, residing at 4900 West 78th Street, Bloomington, MN 55435, and Adam Opoczynski, residing at 8911 Sylvan Ridge, Eden Prairie, MN 55347, and David S. Russell, residing at 5145 Luverne Avenue, Minneapolis, MN 55419, and Calvin G. Nelson, residing at 6070 Lake Virginia Drive So., Shorewood, MN 55331, and Niranjan R. Samant, residing at 229 Ridgefield Drive, Middletown, CT 06547, and Joseph F. Chiappetta, residing at 6 Ranch Drive, Trumbull, CT 06611, and Scott Sarnikowski, residing at 13235 57th Avenue North, Plymouth, MN 55442, made certain new and useful inventions and improvements for which We filed an application for Letters Patent of the United States on June 28, 1996, and was assigned US serial number <u>08/673,002</u>, and is entitled **COMMUNICATION SYSTEM WITH MULTICARRIER TELEPATHY** TRANSPORT.

Page 2 of 17

AND WHEREAS, <u>ADC Telecommunications</u>, Inc., a corporation organized and existing under and by virtue of the laws of the State of <u>Minnesota</u>, and having an office and place of business at <u>4900 West 78th Street</u>, <u>Bloomington</u>, <u>MN 55435</u>, (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me/us and that full right to convey the same as herein expressed is possessed by us.

IN TESTIMONY WHEREOF, I have hereunto set my hand this __ day of _______, 1996.

Mark J. Dapper

STATE OF ______)

State OF ______)

On this __ day of ______, 1996 before me personally appeared Mark J. Dapper to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

Notary Public

Docket No.: 500.623US1 Serial No.: 08/673,002 Filing Date: June 28, 1996

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Michael J. Geile STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared Michael J. Geile to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996. Terrance J. Hill STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Terrance J. Hill</u> to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

	teunto set my hand this day of, 1996.
STATE OF) ss. COUNTY OF)	Harold A. Roberts
On this day of, 199	6 before me personally appeared <u>Harold A. Roberts</u>
to me known and known to me to be the person	on described in and who executed the foregoing
instrument, and he/she duly acknowledged to	me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	Notary Public
IN TESTIMONY WHEREOF, I have he	reunto set my hand this day of, 1996.
	Brian D. Anderson
STATE OF) ss. COUNTY OF)	
On this day of, 199	96 before me personally appeared <u>Brian D. Anderson</u>
to me known and known to me to be the pers	son described in and who executed the foregoing
instrument, and he/she duly acknowledged to	o me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	
	Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Jeffrey Brede
STATE OF)
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Jeffrey Brede</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Mark S. Wadman STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared Mark S. Wadman
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have he	reunto set my hand this day of, 1996.
	Robert J. Kirscht
STATE OF)	
)ss.	
On this day of, 199	of before me personally appeared Robert J. Kirscht to
me known and known to me to be the person	described in and who executed the foregoing
instrument, and he/she duly acknowledged to	me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	
	Notary Public
IN TESTIMONY WHEREOF, I have he	ereunto set my hand this day of, 1996.
OTT LTTT OF	James J. Herrmann
STATE OF))ss.	
COUNTY OF)	
On this day of, 19	96 before me personally appeared <u>James J. Herrmann</u>
to me known and known to me to be the personal	son described in and who executed the foregoing
instrument, and he/she duly acknowledged to	o me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	
	Notary Public

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IN TESTIMONY WHEREOF, I have	hereunto set my hand this day of, 1996.
	Jeff Solum
STATE OF) ss.	
COUNTY OF)	
On this day of, 1	996 before me personally appeared <u>Jeff Solum</u> to me
known and known to me to be the person d	escribed in and who executed the foregoing instrument,
and he/she duly acknowledged to me that h	ne/she executed the same for the uses and purposes
therein set forth.	
[SEAL]	
	Notary Public
IN TESTIMONY WHEREOF, I have	hereunto set my hand this day of, 1996.
OTATE OF	Debra Lea Enfield
STATE OF) ss. COUNTY OF)	
On this day of, 1	1996 before me personally appeared <u>Debra Lea Enfield</u>
to me known and known to me to be the pe	erson described in and who executed the foregoing
instrument, and he/she duly acknowledged	to me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Darrell Berg STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Darrell Berg</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Thomas Smigelski STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Thomas Smigelski</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Thomas C. Tucker STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Thomas C. Tucker</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Joe Hall STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Joe Hall</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
John M. Logajan STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared John M. Logajan to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Somvay Boualouang STATE OF)) Somvay Boualouang COUNTY OF)
On this day of, 1996 before me personally appeared <u>Somvay</u>
Boualouang to me known and known to me to be the person described in and who executed the
foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the
uses and purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.	
Heng Lou	
STATE OF)	
)ss. COUNTY OF)	
On this day of, 1996 before me personally appeared Heng Lou to me	
known and known to me to be the person described in and who executed the foregoing instrument,	
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes	
therein set forth.	
[SEAL]	
Notary Public	
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.	
Mark D. Elpers STATE OF)	
)ss. COUNTY OF)	
On this day of, 1996 before me personally appeared Mark D. Elpers to	
me known and known to me to be the person described in and who executed the foregoing	
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and	
purposes therein set forth.	
[SEAL]	
Notary Public	

Docket No.: 500.623US1 Serial No.: 08/673,002 Filing Date: June 28, 1996 Page 14 of 17 IN TESTIMONY WHEREOF, I have hereunto set my hand this ___ day of ______, 1996. Matt Downs STATE OF _____) COUNTY OF ______) On this ___ day of _____, 1996 before me personally appeared Matt Downs to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth. [SEAL] Notary Public IN TESTIMONY WHEREOF, I have hereunto set my hand this ___ day of ______, 1996. Tammy Ferris STATE OF ______)
ss.

On this _______, 1996 before me personally appeared <u>Tammy Ferris</u> to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

COUNTY OF _____)

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Adam Opoczynski STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Adam Opoczynski</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
David S. Russell STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>David S. Russell</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Calvin G. Nelson
STATE OF)) ss. COUNTY OF)
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Calvin G. Nelson</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this 3 day of January, 1996. Niranjan R. Samant STATE OF COMMISSION.
Niranjan R. Samant
STATE OF Connecticut))ss. COUNTY OF New Jewer)
COUNTY OF New Jewer)
On this 23 day of Sanuay, 1996 before me personally appeared Niranjan R. Samant
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Klada U. Tevell
Notary Public My COMMESSION UXP. 3/3/199
Ind commission of the

IN TESTIMONY WHEREOF, I have hereunto set my hand this Blay of Lanuary, 1996.

Joseph F. Chiappetta STATE OF (onnectivet))ss. COUNTY OF (New Here). On this $\frac{93}{2}$ day of $\frac{1996}{2}$ before me personally appeared $\frac{1}{2}$ Joseph F. Chiappetta to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth. [SEAL] IN TESTIMONY WHEREOF, I have hereunto set my hand this ___ day of ______, 1996. Scott Sarnikowski STATE OF _____)
)ss. COUNTY OF _____) On this ___ day of _____, 1996 before me personally appeared <u>Scott Sarnikowski</u> to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth. [SEAL] Notary Public

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ASSIGNMENT

WHEREAS, WE, Mark J. Dapper, residing at 6558 Baywood Lane, Cincinnati, OH 45224, and Michael J. Geile, residing at 316 Miami Valley Drive, Loveland, OH 45140, and Terrance J. Hill, residing at 1765 Garrett House Lane, Fairfield, OH 45014, and Harold A. Roberts, residing at 7017 Beacon Circle, Eden Prairie, MN 55346, and Brian D. Anderson, residing at 11430 - 50th Place North, Plymouth, MN 55442, and Jeffrey Brede, residing at 8073 Curtis Lane, Eden Prairie, MN 55347, and Mark S. Wadman, residing at 8956 Braxton Drive, Eden Prairie, MN 55347, and Robert J. Kirscht, residing at 13106 Vernon Avenue South, Savage, MN 55378, and James J. Herrmann, residing at 1894 Sunrise Court, Eagan, MN 55122, and Michael J. Fort, residing at 1045 Northyiew Park, Eagan, MN 55123, and Steven P. Buska, residing at 13370 Stanton Drive, Minnetonka, MN 55305, and Jeff Solum. residing at 4900 West 78th Street, Bloomington, MN 55435, and Debra Lea Enfield, residing at 464 Ridge Court, Chaska, MN 55318, and Darrell Berg, residing at 4900 West 78th Street, Bloomington, MN 55435, and Thomas Smigelski, residing at 230 Waterford Drive, Lake Zurich, IL 60047, and Thomas C. Tucker, residing at 205 Silver Creek Trail, Chapel Hill, NC 27514, and Joe Hall, residing at 4900 West 78th Street, Bloomington, MN 55435, and John M. Logajan, residing at 4248 Hamline Avenue, Arden Hills, MN 55112, and Somvay Boualouang, residing at 4900 West 78th Street, Bloomington, MN 55435, and Heng Lou, residing at 4900 West 78th Street, Bloomington, MN 55435, and Mark D. Elpers, residing at 16303 205th Avenue NW, Elk River, MN 55330, and Matt Downs, residing at 4900 West 78th Street, Bloomington, MN 55435, and Tammy Ferris, residing at 4900 West 78th Street, Bloomington, MN 55435, and Adam Opoczynski, residing at 8911 Sylvan Ridge, Eden Prairie, MN 55347, and David S. Russell, residing at 5145 Luverne Avenue, Minneapolis, MN 55419, and Calvin G. Nelson, residing at 6070 Lake Virginia Drive So., Shorewood, MN 55331, and Niranjan R. Samant, residing at 229 Ridgefield Drive, Middletown, CT 06547, and Joseph F. Chiappetta, residing at 6 Ranch Drive, Trumbull, CT 06611, and Scott Sarnikowski, residing at 13235 57th Avenue North, Plymouth, MN 55442, made certain new and useful inventions and improvements for which We filed an application for Letters Patent of the United States on June 28, 1996, and was assigned US serial number _08/673,002, and is entitled COMMUNICATION SYSTEM WITH MULTICARRIER TELEPATHY TRANSPORT.

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AND WHEREAS, <u>ADC Telecommunications</u>, Inc., a corporation organized and existing under and by virtue of the laws of the State of <u>Minnesota</u>, and having an office and place of business at <u>4900 West 78th Street</u>, <u>Bloomington</u>, <u>MN 55435</u>, (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me/us and that full right to convey the same as herein expressed is possessed by us.

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IN TESTIMONY WHEREOF, I have hereunt set my hand this 27 day of January 1997.

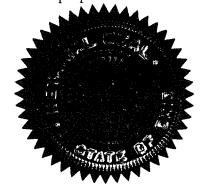
Mark J. Dapper

STATE OF Ohio

)55

COUNTY OF Butler

On this 27 day of January, 1996 before me personally appeared Mark J. Dapper to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.



<u> Menda Buges</u> Notary Public

BRENDA BERGER Notary Public, State of Ohio My Commission Expires April 18, 2000

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Serial No.: 08/673,002
Filing Date: June 28, 1996
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2

IN TESTIMONY WHEREOF, I have hereunto set my hand this 22 day of January, 1998.

Michael J. Greile STATE OF Ohio county of Butter)ss. On this <u>22</u> day of <u>January</u>, 1996 before me personally appeared <u>Michael J. Geile</u> to me known and known to me to be the person described in and who executed the foregoing and he/she duly acknowledged to me that he/she executed the same for the uses and et forth. BRENDA BERGER
Notary Public, State of Ohio
Notary Public
My Commission Expires April 18, 2000 ESTIMONY WHEREOF, I have hereunto set my hand this 23day of TAN., 1995.

Terrance J. Hill STATE OF COUNTY OF Butler

On this 23 day of January, 1997 before me personally appeared Terrance J. Hill to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.



Notary Public Sugar

BRENDA BERGER Notary Public, State of Ohio My Commission Expires April 18, 2000

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Harold A. Roberts
STATE OF))ss.
COUNTY OF)
On this day of, 1996 before me personally appeared Harold A. Roberts
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Brian D. Anderson STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Brian D. Anderson</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Jeffrey Brede
On this day of, 1996 before me personally appeared <u>Jeffrey Brede</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Mark S. Wadman STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared Mark S. Wadman
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Robert J. Kirscht
STATE OF) ss.
COUNTY OF)
On this day of, 1996 before me personally appeared Robert J. Kirscht to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
James J. Herrmann
STATE OF)) ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>James J. Herrmann</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Michael J. Fort
STATE OF))ss.
COUNTY OF)
On this day of, 1996 before me personally appeared Michael J. Fort to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Steven P. Buska
STATE OF) ss.
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Steven P. Buska</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public

Īe	ff Solum
STATE OF)	ii Solulli
COUNTY OF)	
On this day of, 1996	before me personally appeared <u>Jeff Solum</u> to me
known and known to me to be the person descri	ribed in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes	
therein set forth.	
[SEAL]N	otary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.	
STATE OF) State of) State of)	ebra Lea Enfield
On this day of, 1996	before me personally appeared <u>Debra Lea Enfield</u>
to me known and known to me to be the perso	n described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and	
purposes therein set forth.	
[SEAL]	Notary Public

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IN TESTIMONY WHEREOF, I have here	eunto set my hand this day of, 1996.
STATE OF) ss. COUNTY OF)	Parrell Berg
On this day of, 1996	before me personally appeared <u>Darrell Berg</u> to me
known and known to me to be the person desc	ribed in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/s	he executed the same for the uses and purposes
therein set forth.	
[SEAL]	Notary Public .
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.	
STATE OF)	`homas Smigelski
On this day of, 199	6 before me personally appeared <u>Thomas Smigelski</u>
to me known and known to me to be the person	on described in and who executed the foregoing
instrument, and he/she duly acknowledged to	me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	Notary Public
•	wai y i dollo

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IN TESTIMONY WHEREOF, I have her	eunto set my hand this day of, 1996.
STATE OF)	Thomas C. Tucker
On this day of, 199	before me personally appeared <u>Thomas C. Tucker</u>
to me known and known to me to be the person	on described in and who executed the foregoing
instrument, and he/she duly acknowledged to	me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.	
	oe Hall
STATE OF)	
On this day of, 199	6 before me personally appeared <u>Joe Hall</u> to me
known and known to me to be the person des	cribed in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/s	she executed the same for the uses and purposes
therein set forth.	
[SEAL]	N. D. I.
	Notary Public

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IN TESTIMONY WHEREOF, I have he	ereunto set my hand this day of, 1996.
	John M. Logajan
STATE OF)	
)ss. COUNTY OF)	
On this day of, 19	96 before me personally appeared <u>John M. Logajan</u> to
me known and known to me to be the person	n described in and who executed the foregoing
instrument, and he/she duly acknowledged t	o me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	Notary Public
IN TESTIMONY WHEREOF, I have h	ereunto set my hand this day of, 1996.
CT - TT - CT	Somvay Boualouang
STATE OF) ss.	
COUNTY OF)	
On this day of, 19	996 before me personally appeared <u>Somvay</u>
Boualouang to me known and known to me	e to be the person described in and who executed the
foregoing instrument, and he/she duly acknowledge.	owledged to me that he/she executed the same for the
uses and purposes therein set forth.	
[SEAL]	
	Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Heng Lou STATE OF))ss. COUNTY OF)
On this day of, 1996 before me personally appeared Heng Lou to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL] Notary Public .
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Mark D. Elpers STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared Mark D. Elpers to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Matt Downs
STATE OF))ss.
COUNTY OF)
On this day of, 1996 before me personally appeared Matt Downs to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Tammy Ferris
STATE OF)
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Tammy Ferris</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Adam Opoczynski STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Adam Opoczynski</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
David S. Russell
STATE OF)) ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>David S. Russell</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Calvin G. Nelson
STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Calvin G. Nelson</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Niranjan R. Samant
STATE OF)) ss. COUNTY OF)
On this day of, 1996 before me personally appeared Niranjan R. Samant
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Joseph F. Chiappetta
STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Joseph F.</u>
Chiappetta to me known and known to me to be the person described in and who executed the
foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the
uses and purposes therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996. Scott Sarnikowski STATE OF) ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Scott Sarnikowski</u> to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.
[SEAL]
Notary Public

ASSIGNMENT

WHEREAS, WE, Mark J. Dapper, residing at 6558 Baywood Lane, Cincinnati, OH 45224, and Michael J. Geile, residing at 316 Miami Valley Drive, Loveland, OH 45140, and Terrance J. Hill, residing at 1765 Garrett House Lane, Fairfield, OH 45014, and Harold A. Roberts, residing at 7017 Beacon Circle, Eden Prairie, MN 55346, and Brian D. Anderson, residing at 11430 - 50th Place North, Plymouth, MN 55442, and Jeffrey Brede, residing at 8073 Curtis Lane, Eden Prairie, MN 55347, and Mark S. Wadman, residing at 8956 Braxton Drive, Eden Prairie, MN 55347, and Robert J. Kirscht, residing at 13106 Vernon Avenue South, Savage, MN 55378, and James J. Herrmann, residing at 1894 Sunrise Court, Eagan, MN 55122, and Michael J. Fort, residing at 1045 Northview Park, Eagan, MN 55123, and Steven P. Buska, residing at 13370 Stanton Drive, Minnetonka, MN 55305, and Jeff Solum, residing at 4900 West 78th Street, Bloomington, MN 55435, and Debra Lea Enfield, residing at 464 Ridge Court, Chaska, MN 55318, and Darrell Berg, residing at 4900 West 78th Street. Bloomington, MN 55435, and Thomas Smigelski, residing at 230 Waterford Drive, Lake Zurich, IL 60047, and Thomas C. Tucker, residing at 205 Silver Creek Trail, Chapel Hill, NC 27514, and Joe Hall, residing at 4900 West 78th Street, Bloomington, MN 55435, and John M. Logajan, residing at 4248 Hamline Avenue, Arden Hills, MN 55112, and Somvay Boualouang, residing at 4900 West 78th Street, Bloomington, MN 55435, and Heng Lou, residing at 4900 West 78th Street, Bloomington, MN 55435, and Mark D. Elpers, residing at 16303 205th Avenue NW, Elk River, MN 55330, and Matt Downs, residing at 4900 West 78th Street, Bloomington, MN 55435, and Tammy Ferris, residing at 4900 West 78th Street, Bloomington, MN 55435, and Adam Opoczynski, residing at 8911 Sylvan Ridge, Eden <u>Prairie, MN 55347</u>, and <u>David S. Russell</u>, residing at <u>5145 Luverne Avenue</u>, <u>Minneapolis</u>, MN 55419, and Calvin G. Nelson, residing at 6070 Lake Virginia Drive So., Shorewood, MN 55331, and Niranjan R. Samant, residing at 229 Ridgefield Drive, Middletown, CT 06547, and Joseph F. Chiappetta, residing at 6 Ranch Drive, Trumbull, CT 06611, and Scott Sarnikowski, residing at 13235 57th Avenue North, Plymouth, MN 55442, made certain new and useful inventions and improvements for which We filed an application for Letters Patent of the United States on June 28, 1996, and was assigned US serial number 08/673,002, and is entitled COMMUNICATION SYSTEM WITH MULTICARRIER TELEPATHY TRANSPORT.

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AND WHEREAS, <u>ADC Telecommunications</u>, Inc., a corporation organized and existing under and by virtue of the laws of the State of <u>Minnesota</u>, and having an office and place of business at <u>4900 West 78th Street</u>, <u>Bloomington</u>, <u>MN 55435</u>, (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me/us and that full right to convey the same as herein expressed is possessed by us.

IN TESTIMONY WHEREOF, I have nereunto set my hand this day of, 1996.	
Mark J. Dapper	
STATE OF)	
)ss. COUNTY OF)	
On this day of, 1996 before me personally appeared Mark J. Dappe	r to
me known and known to me to be the person described in and who executed the foregoing	
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses an	d
purposes therein set forth.	
[SEAL]	
Notary Public	

IN TESTIMONY WHEREOF, I have her	eunto set my hand this day of, 1996.
Ī	Michael J. Geile
STATE OF))ss.	
COUNTY OF)	
On this day of, 199	before me personally appeared Michael J. Geile to
me known and known to me to be the person	described in and who executed the foregoing
instrument, and he/she duly acknowledged to	me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	Notary Public
IN TESTIMONY WHEREOF, I have her	reunto set my hand this day of, 1996.
	Terrance J. Hill
STATE OF))ss.	
COUNTY OF)	
On this day of, 199	6 before me personally appeared <u>Terrance J. Hill</u> to
me known and known to me to be the person	described in and who executed the foregoing
instrument, and he/she duly acknowledged to	me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	
	Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Harold A. Roberts
STATE OF) ss.
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Harold A. Roberts</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Brian D. Anderson
STATE OF)) ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Brian D. Anderson</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Jeffrey Brede STATE OF)
On this day of, 1996 before me personally appeared <u>Jeffrey Brede</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Mark S. Wadman
STATE OF)) ss. COUNTY OF)
On this day of, 1996 before me personally appeared Mark S. Wadman
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Robert J. Kirscht STATE OF) ,)ss. COUNTY OF)
On this day of, 1996 before me personally appeared Robert J. Kirscht to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
James J. Herrmann STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>James J. Herrmann</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Michael J. Fort
STATE OF))ss.
COUNTY OF)
On this day of, 1996 before me personally appeared Michael J. Fort to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Steven P. Buska
STATE OF))ss.
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Steven P. Buska</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Jeff Solum
STATE OF) ss.
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Jeff Solum</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Debra Lea Enfield STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Debra Lea Enfield</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Darrell Berg
STATE OF)
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Darrell Berg</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Thomas Smigelski
STATE OF)
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Thomas Smigelski</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have her	reunto set my hand this day of, 1996.
;	Thomas C. Tucker
STATE OF) ss.	
COUNTY OF)	
On this day of, 199	6 before me personally appeared <u>Thomas C. Tucker</u>
to me known and known to me to be the person	on described in and who executed the foregoing
instrument, and he/she duly acknowledged to	me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	N. D. L.
	Notary Public
IN TESTIMONY WHEREOF, I have he	reunto set my hand this day of, 1996.
	Joe Hall
STATE OF))ss.	
COUNTY OF)	
On this day of, 199	before me personally appeared <u>Joe Hall</u> to me
known and known to me to be the person des	scribed in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/	she executed the same for the uses and purposes
therein set forth.	
[SEAL]	
	Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
John M. Logajan
STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>John M. Logajan</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Somvay Boualouang
STATE OF) ss.
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Somvay</u>
Boualouang to me known and known to me to be the person described in and who executed the
foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the
uses and purposes therein set forth.
[SEAL]
Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Heng Lou STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Heng Lou</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Mark D. Elpers
STATE OF)) ss. COUNTY OF)
On this day of, 1996 before me personally appeared Mark D. Elpers to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Matt Downs
STATE OF) ss.
COUNTY OF)
On this day of, 1996 before me personally appeared Matt Downs to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Tammy Ferris
STATE OF) ss.
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Tammy Ferris</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public

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IN TESTIMONY WHEREOF, I have he	reunto set my hand this day of, 1996.
	Calvin G. Nelson
STATE OF)	
COUNTY OF)	
On this day of, 199	before me personally appeared <u>Calvin G. Nelson</u> to
me known and known to me to be the person	described in and who executed the foregoing
instrument, and he/she duly acknowledged to	me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	Notary Public
IN TESTIMONY WHEREOF, I have he	ereunto set my hand this day of, 1996.
STATE OF)	Niranjan R. Samant
)ss. COUNTY OF)	
On this day of, 19	96 before me personally appeared <u>Niranjan R. Samant</u>
to me known and known to me to be the per-	son described in and who executed the foregoing
instrument, and he/she duly acknowledged t	o me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	
	Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Joseph F. Chiappetta
STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Joseph F.</u>
Chiappetta to me known and known to me to be the person described in and who executed the
foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the
uses and purposes therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996. Scott Sarnikowski STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Scott Sarnikowski</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public

ASSIGNMENT

WHEREAS, WE, Mark J. Dapper, residing at 6558 Baywood Lane, Cincinnati, OH 45224, and Michael J. Geile, residing at 316 Miami Valley Drive, Loveland, OH 45140, and Terrance J. Hill, residing at 1765 Garrett House Lane, Fairfield, OH 45014, and Harold A. Roberts, residing at 7017 Beacon Circle, Eden Prairie, MN 55346, and Brian D. Anderson. residing at 11430 - 50th Place North, Plymouth, MN 55442, and Jeffrey Brede, residing at 8073 Curtis Lane, Eden Prairie, MN 55347, and Mark S. Wadman, residing at 8956 Braxton Drive, Eden Prairie, MN 55347, and Robert J. Kirscht, residing at 13106 Vernon Avenue South, Savage, MN 55378, and James J. Herrmann, residing at 1894 Sunrise Court, Eagan, MN 55122, and Michael J. Fort, residing at 1045 Northview Park, Eagan, MN 55123, and Steven P. Buska, residing at 13370 Stanton Drive, Minnetonka, MN 55305, and Jeff Solum, residing at 4900 West 78th Street, Bloomington, MN 55435, and Debra Lea Enfield, residing at 464 Ridge Court, Chaska, MN 55318, and Darrell Berg, residing at 4900 West 78th Street, Bloomington, MN 55435, and Thomas Smigelski, residing at 230 Waterford Drive, Lake Zurich, IL 60047, and Thomas C. Tucker, residing at 205 Silver Creek Trail, Chapel Hill, NC 27514, and Joe Hall, residing at 4900 West 78th Street, Bloomington, MN 55435, and John M. Logajan, residing at 4248 Hamline Avenue, Arden Hills, MN 55112, and Somvay Boualouang, residing at 4900 West 78th Street, Bloomington, MN 55435, and Heng Lou, residing at 4900 West 78th Street, Bloomington, MN 55435, and Mark D. Elpers, residing at 16303 205th Avenue NW, Elk River, MN 55330, and Matt Downs, residing at 4900 West 78th Street, Bloomington, MN 55435, and Tammy Ferris, residing at 4900 West 78th Street, Bloomington, MN 55435, and Adam Opoczynski, residing at 8911 Sylvan Ridge, Eden Prairie, MN 55347, and David S. Russell, residing at 5145 Luverne Avenue, Minneapolis, MN 55419, and Calvin G. Nelson, residing at 6070 Lake Virginia Drive So., Shorewood, MN 55331, and Niranjan R. Samant, residing at 229 Ridgefield Drive, Middletown, CT 06547, and Joseph F. Chiappetta, residing at 6 Ranch Drive, Trumbull, CT 06611, and Scott Sarnikowski, residing at 13235 57th Avenue North, Plymouth, MN 55442, made certain new and useful inventions and improvements for which We filed an application for Letters Patent of the United States on June 28, 1996, and was assigned US serial number 08/673,002, and is entitled **COMMUNICATION SYSTEM WITH MULTICARRIER TELEPATHY** TRANSPORT.

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AND WHEREAS, <u>ADC Telecommunications</u>, Inc., a corporation organized and existing under and by virtue of the laws of the State of <u>Minnesota</u>, and having an office and place of business at <u>4900 West 78th Street</u>, <u>Bloomington</u>, <u>MN 55435</u>, (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me/us and that full right to convey the same as herein expressed is possessed by us.

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purposes therein set forth.

[SEAL]

Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Michael J. Geile
STATE OF) ss.
COUNTY OF)
On this day of, 1996 before me personally appeared Michael J. Geile to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Terrance J. Hill STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Terrance J. Hill</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Harold A. Roberts STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared Harold A. Roberts
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Brian D. Anderson
STATE OF)) ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Brian D. Anderson</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Jeffrey Brede
STATE OF))ss.
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Jeffrey Brede</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Mark S. Wadman STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared Mark S. Wadman
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Robert J. Kirscht
STATE OF) ss.
COUNTY OF)
On this day of, 1996 before me personally appeared Robert J. Kirscht to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
James J. Herrmann
STATE OF)) ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>James J. Herrmann</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
rotary i done

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Michael J. Fort
STATE OF))ss.
COUNTY OF)
On this day of, 1996 before me personally appeared Michael J. Fort to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Steven P. Buska
STATE OF))ss.
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Steven P. Buska</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Jeff Solum
STATE OF)
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Jeff Solum</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Debra Lea Enfield
STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Debra Lea Enfield</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Darrell Berg STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Darrell Berg</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Thomas Smigelski STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Thomas Smigelski</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

IN TESTIMONY WHEREOF, I have hereunto let my hand this 27 day of Junuary, 1996.7

Thomas C. Tucker STATE OF COUNTY OF & On this 27th day of Junian, 1997 before me personally appeared Thomas C. Tucker to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth. [SEAL] IN TESTIMONY WHEREOF, I have hereunto set my hand this ___ day of ______, 1996. Joe Hall COUNTY OF) On this ____ day of ______, 1996 before me personally appeared Joe Hall to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth. [SEAL]

Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
John M. Logajan
STATE OF)
COUNTY OF)
On this day of, 1996 before me personally appeared John M. Logajan to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Somvay Boualouang
STATE OF))ss.
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Somvay</u>
Boualouang to me known and known to me to be the person described in and who executed the
foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the
uses and purposes therein set forth.
[SEAL]
Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Heng Lou
STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared Heng Lou to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Mark D. Elpers
STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared Mark D. Elpers to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Matt Downs
STATE OF) ss.
COUNTY OF)
On this day of, 1996 before me personally appeared Matt Downs to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Tammy Ferris
STATE OF) ss.
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Tammy Ferris</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Adam Opoczynski
STATE OF) ss.
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Adam Opoczynski</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
David S. Russell
STATE OF))ss.
COUNTY OF)
On this day of, 1996 before me personally appeared <u>David S. Russell</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Calvin G. Nelson
STATE OF)
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Calvin G. Nelson</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Niranjan R. Samant
STATE OF))ss.
COUNTY OF)
On this day of, 1996 before me personally appeared Niranjan R. Samant
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Joseph F. Chiappetta
TATE OF) ss.
)ss.
On this day of, 1996 before me personally appeared <u>Joseph F.</u>
Chiappetta to me known and known to me to be the person described in and who executed the
oregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the
ses and purposes therein set forth.
SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996. Scott Sarnikowski STATE OF))) Ss. COUNTY OF)
On this, 1996 before me personally appeared <u>Scott Sarnikowski</u> to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.
[SEAL] ————————————————————————————————————

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Jeffrey Brede
STATE OF)
)ss. COUNTY OF)
On thisday of, 1996 before me personally appeared <u>Jeffrey Brede</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this 32 day of Lu, 1996. Mark S. Wadman
Mark S. Wadman
STATE OF TELOS) SS. COUNTY OF DALLAS)
COUNTY OF ALLAS
On this 30th day of Towary, 1996 before me personally appeared Mark S. Wadman
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public



ASSIGNMENT

WHEREAS, WE, Mark J. Dapper, residing at 6558 Baywood Lane, Cincinnati, OH 45224, and Michael J. Geile, residing at 316 Miami Valley Drive, Loveland, OH 45140, and Terrance J. Hill, residing at 1765 Garrett House Lane, Fairfield, OH 45014, and Harold A. Roberts, residing at 7017 Beacon Circle, Eden Prairie, MN 55346, and Brian D. Anderson. residing at 11430 - 50th Place North, Plymouth, MN 55442, and Jeffrey Brede, residing at 8073 Curtis Lane, Eden Prairie, MN 55347, and Mark S. Wadman, residing at 8956 Braxton Drive, Eden Prairie, MN 55347, and Robert J. Kirscht, residing at 13106 Vernon Avenue South, Savage, MN 55378, and James J. Herrmann, residing at 1894 Sunrise Court, Eagan, MN 55122, and Michael J. Fort, residing at 1045 Northview Park, Eagan, MN 55123, and Steven P. Buska, residing at 13370 Stanton Drive, Minnetonka, MN 55305, and Jeff Solum, residing at 4900 West 78th Street, Bloomington, MN 55435, and Debra Lea Enfield, residing at 464 Ridge Court, Chaska, MN 55318, and Darrell Berg, residing at 4900 West 78th Street, Bloomington, MN 55435, and Thomas Smigelski, residing at 230 Waterford Drive, Lake Zurich, IL 60047, and Thomas C. Tucker, residing at 205 Silver Creek Trail, Chapel Hill, NC 27514, and Joe Hall, residing at 4900 West 78th Street, Bloomington, MN 55435, and John M. Logajan, residing at 4248 Hamline Avenue, Arden Hills, MN 55112, and Somvay Boualouang, residing at 4900 West 78th Street, Bloomington, MN 55435, and Heng Lou, residing at 4900 West 78th Street, Bloomington, MN 55435, and Mark D. Elpers, residing at 16303 205th Avenue NW, Elk River, MN 55330, and Matt Downs, residing at 4900 West 78th Street, Bloomington, MN 55435, and Tammy Ferris, residing at 4900 West 78th Street, Bloomington, MN 55435, and Adam Opoczynski, residing at 8911 Sylvan Ridge, Eden Prairie, MN 55347, and David S. Russell, residing at 5145 Luverne Avenue, Minneapolis. MN 55419, and Calvin G. Nelson, residing at 6070 Lake Virginia Drive So., Shorewood, MN 55331, and Niranjan R. Samant, residing at 229 Ridgefield Drive, Middletown, CT 06547. and Joseph F. Chiappetta, residing at 6 Ranch Drive, Trumbull, CT 06611, and Scott Sarnikowski, residing at 13235 57th Avenue North, Plymouth, MN 55442, made certain new and useful inventions and improvements for which We filed an application for Letters Patent of the United States on June 28, 1996, and was assigned US serial number 08/673,002, and is entitled COMMUNICATION SYSTEM WITH MULTICARRIER TELEPATHY TRANSPORT.

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AND WHEREAS, <u>ADC Telecommunications</u>, Inc., a corporation organized and existing under and by virtue of the laws of the State of <u>Minnesota</u>, and having an office and place of business at <u>4900 West 78th Street</u>, <u>Bloomington</u>, <u>MN 55435</u>, (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me/us and that full right to convey the same as herein expressed is possessed by us.

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purposes therein set forth.

[SEAL]

Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Michael J. Geile STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared Michael J. Geile to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Terrance J. Hill STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Terrance J. Hill</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Harold A. Roberts STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared Harold A. Roberts
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Brian D. Anderson STATE OF)
On this day of, 1996 before me personally appeared <u>Brian D. Anderson</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Jeffrey Brede
STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Jeffrey Brede</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Mark S. Wadman
STATE OF) ss.
COUNTY OF)
On this day of, 1996 before me personally appeared Mark S. Wadman
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Robert J. Kirscht STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared Robert J. Kirscht to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
James J. Herrmann
STATE OF)) ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>James J. Herrmann</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have he	reunto set my hand this day of, 1996.
	Michael J. Fort
STATE OF)	
)ss. COUNTY OF)	
On this day of, 199	before me personally appeared Michael J. Fort to
me known and known to me to be the person	described in and who executed the foregoing
instrument, and he/she duly acknowledged to	me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	N. 4 D.11
	Notary Public
IN TESTIMONY WHEREOF, I have he	reunto set my hand this day of, 1996.
	Steven P. Buska
STATE OF) ss.	
COUNTY OF)	
On this day of, 199	96 before me personally appeared <u>Steven P. Buska</u> to
me known and known to me to be the person	described in and who executed the foregoing
instrument, and he/she duly acknowledged to	o me that he/she executed the same for the uses and
purposes therein set forth.	
[SEAL]	
	Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Jeff Solum
STATE OF)) ss. COUNTY OF)
)ss.
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Jeff Solum</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this 5th day of May, 1996.
Debra Lea Enfield
STATE OF Manusota)
STATE OF Manusola) State OF Manusola) September 2 September 2 September 2 State Of Manusola) September 2 September
On this 5 day of May 1996 hefore me personally appeared Debre Lee Enfeld
On this 5 day of My, 1996 before me personally appeared <u>Debra Lea Enfield</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Jahran Jahran
KAREN S. FARAGO Notary Rublic
MOTARY PUBLIC-MINISTERS &
(m) C

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Darrell Berg STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Darrell Berg</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Thomas Smigelski STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Thomas Smigelski</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Thomas C. Tucker STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Thomas C. Tucker</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Joe Hall STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Joe Hall</u> to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
John M. Logajan STATE OF) ss. COUNTY OF)
On this day of, 1996 before me personally appeared John M. Logajan to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Somvay Boualouang STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Somvay</u>
Boualouang to me known and known to me to be the person described in and who executed the
foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the
uses and purposes therein set forth.
[SEAL]Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Heng Lou STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared Heng Lou to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL] Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Mark D. Elpers
STATE OF)) ss. COUNTY OF)
On this day of, 1996 before me personally appeared Mark D. Elpers to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Matt Downs
STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared Matt Downs to me
known and known to me to be the person described in and who executed the foregoing instrument,
and he/she duly acknowledged to me that he/she executed the same for the uses and purposes
therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Tammy Ferris
STATE OF) ss.
COUNTY OF)
On this day of, 1996 before me personally appeared <u>Tammy Ferris</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]
Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Adam Opoczynski STATE OF)) SS. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Adam Opoczynski</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
David S. Russell STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>David S. Russell</u> to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL] Notary Public

IN TESTIMONY WHEREOF, I have hereunto set my hand this Zday of 1996.
ale A Meltion
STATE OF Minesota) Calvin G. Nelson
)ss. COUNTY OF Hermepin)
On this 22 day of May, 1996 before me personally appeared Calvin G. Nelson to
me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she-duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth. [SEAL] SHARON L. KOENIG SALONOTARY PUBLIC - MINNESOTA SALONOTARY PUBLIC - MINNESOTARY PUBLIC - MINNESOTA SALONOTARY PUBLIC - MINNESOTARY PUBLIC - MI
SCOTT COUNTY My Comm. Expires Jan. 31, 2000 Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Niranjan R. Samant STATE OF)
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared Niranjan R. Samant
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and
purposes therein set forth.
[SEAL]

Notary Public

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IN TESTIMONY WHEREOF, I have hereunto set my hand this day of, 1996.
Joseph F. Chiappetta
STATE OF))ss.
)ss. COUNTY OF)
On this day of, 1996 before me personally appeared <u>Joseph F.</u>
Chiappetta to me known and known to me to be the person described in and who executed the
foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the
uses and purposes therein set forth.
[SEAL]
Notary Public
IN TESTIMONY WHEREOF, I have hereunto set my hand this 22 fley of May, 1996. Scott Sarnikowski
STATE OF CALIFORNA) Scott Sarnikowski Scott Sarnikowski Scott Sarnikowski Scott Sarnikowski
On this 22 day of, 1996 before me personally appeared <u>Scott Sarnikowski</u>
to me known and known to me to be the person described in and who executed the foregoing
instrument, and he ste duly acknowledged to me that the stee executed the same for the uses and
[SEAL] SEAL SEAL SEAL SEAL SEAL SEAL SEAL SEAL

PATENT REEL: 022071 FRAME: 0721

RECORDED: 01/08/2009