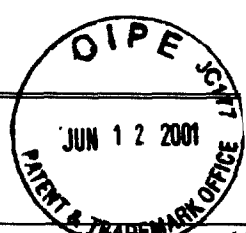


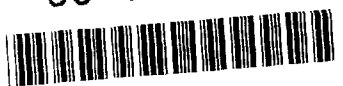
D 45



06-19-2001

0223-01

Form PTO-1595
1-31-92



101752990
EXHIBIT ONLY

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

To the Director - U.S. Patent and Trademark Office. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):
International Telecommunications Satellite Organization
(INTELSAT)

Additional name(s) of conveying party(ies) attached?
☐ yes ☒ no

2. Name and address of receiving party(ies)?
INTELSAT Services Corporation
3400 International Drive, N.W.
Washington, D.C. 20008

6-12-01

Additional name(s) & address(es) attached?
☐ yes ☒ no

3. Nature of Conveyance:
☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Names
☐ Other

Execution Date: June 6, 2001

4. Application number(s) or patent number(s):
If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)/Confirmation No.(s)	B. Patent No.(s)		
09/813,144	4,771,201	4,455,536	4,500,984
	4,911,385	4,858,225	5,086,301
	5,384,845	5,424,962	5,515,056

Additional numbers attached? ☐ Yes ☒ No

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

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Suite 800
Washington, D.C. 20037-3213

6. Total number of applications and registration involved:
10

7. Total Fee (37 CFR 3.41): \$400.00
☒ Enclosed. Please charge any underpayment in connection with this Assignment to Deposit Account No. 19-4880.
☐ Authorized to be charged to Deposit Account

8. Deposit Account No.
19-4880

DO NOT WRITE IN THIS SPACE

9. Statement and Signature.
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Robert J. Seas, Jr. Reg. No. 21,092 June 12, 2001 Date

TOTAL NUMBER OF PAGES COMPRISING COVER SHEET, ATTACHMENTS AND DOCUMENT: 8

OMB No. 0651-0011 (exp. 4/94)

Do not detach this portion

Mail documents to be recorded with required cover sheet information to:
Director - U.S. Patent and Trademark Office
Box Assignment
Washington, D.C. 20231

06/19/2001 TD1A21 00000015 09813144

01 FC:581 400.00 OP

ASSIGNMENT

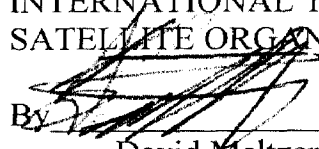
WHEREAS, INTERNATIONAL TELECOMMUNICATIONS SATELLITE ORGANIZATION ("INTELSAT"), an international organization established by the Agreement Relating to the International Telecommunications Satellite Organization "INTELSAT" and the Operating Agreement relating thereto, done at Washington, D.C. on 20 August 1997, with offices located at 3400 International Drive, N.W., Washington, D.C., USA (Assignor) is the owner of the entire right, title and interest in and to the U.S. and foreign patents and patent applications listed in the attached SCHEDULE; and

WHEREAS, INTELSAT Services Corporation, a company organized and existing under the laws of Delaware, USA, with offices located at 3400 International Drive, N.W., Washington, D.C., USA, (Assignee) desires to acquire said entire right, title and interest in and to said U.S. and foreign patents and patent applications.

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to said Assignee, effective July 18, 2001 all of Assignor's ownership of the entire right, title and interest in and to said U.S. and foreign patents and patent applications, including rights to recover damages for past, present and future infringements thereof, and agrees to execute, without further consideration, any additional documentation necessary in furtherance of this Assignment.

INTERNATIONAL TELECOMMUNICATIONS
SATELLITE ORGANIZATION ("INTELSAT")

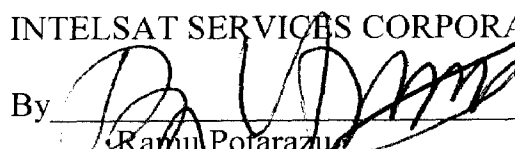
Date 6 June 2001

By 
David Meltzer
Title: Vice President and General Counsel

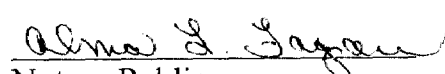
ACCEPTED BY:

INTELSAT SERVICES CORPORATION

Date 6 June 2001

By 
Ramu Potarazu
Title: President and Chief Operating Officer

Subscribed and sworn to before me this 6th day of June, 2001.


Notary Public

SCHEDULE

1. INVENTION REFERENCE NUMBER 17-E-15

Title "Method and Apparatus for Thermionic Energy Conversion"

Country of Filing
United States

Patent No.
No. 4,771,201

Issue Date
September 13, 1988

2. INVENTION REFERENCE NUMBER 18-E-43

Title "Push-Pull Microwave Amplifier"

Country of Filing
United States

Patent No.
No. 4,455,536

Issue Date
June 19, 1984

3. INVENTION REFERENCE NUMBER 22-I-01

Title "Equalizer for Reducing Crosstalk Between Two FDM/FM Carriers in a Satellite Communication System"

Country of Filing
United States

Patent No.
No. 4,500,984

Issue Date
February 19, 1985

4. INVENTION REFERENCE NUMBER 26-I-01

Title "Attitude Pointing Error Correction System and Method for Geosynchronous Satellites"

Country of Filing United States	Patent No. No. 4,911,385	Issue Date March 27, 1990
Canada	Patent No. No. 2 006 199	Issue Date December 1, 1998
France	Patent No. EPO No. 0434861	Issue Date February 22, 1995
Germany	Patent No. EPO No. 0434861	Issue Date February 22, 1995
Italy	Patent No. EPO No. 0434861	Issue Date February 22, 1995
United Kingdom	Patent No. EPO No. 0434861	Issue Date February 22, 1995
Japan	Patent No. No. 2,971,494	Issue Date August 27, 1999
Peoples Republic of China	Patent No. No. 89,109,644.2	Issue Date July 5, 1994

5. INVENTION REFERENCE NUMBER 27-I-01

Title "Variable Bandwidth Variable Center-Frequency Multi-Beam Satellite-Switched Router"

Country of Filing United States	Patent No. No. 4,858,225	Issue Date August 15, 1989
Canada	Patent No. No. 1,332,008	Issue Date September 13, 1994
France	Patent No. No. 2,648,295	Issue Date September 20, 1991
Germany	Application No. No. 39 19 352.7	Filing Date June 10, 1989
Italy	Patent No. No. 1230246	Issue Date June 8, 1989
Japan	Patent No. No. 2,977,562	Issue Date September 10, 1999
United Kingdom	Patent No. No. 2,232,560	Issue Date January 5, 1994

6. INVENTION REFERENCE NUMBER 29-I-01

Title "Polarization Converter Application for Accessing Linearly Polarized Satellite with Single-or-Dual- Circularly Polarized Earth Station Antennas"

Country of Filing United States	Patent No. No. 5,086,301	Issue Date February 4, 1992
Australia	Patent No. No. 631,093	Issue Date March 5, 1993
Canada	Patent No. No. 2,033,856	Issue Date August 15, 2000
Belgium	Patent No. EPO No. 0 437 190	Issue Date October 9, 1996
France	Patent No. EPO No. 0 437 190	Issue Date October 9, 1996
Germany	Patent No. EPO No. 0 437 190	Issue Date October 9, 1996
Italy	Patent No. EPO No. 0 437 190	Issue Date October 9, 1996
Luxembourg	Patent No. EPO No. 0 437 190	Issue Date October 9, 1996
Sweden	Patent No. EPO No. 0 437 190	Issue Date October 9, 1996
Switzerland	Patent No. EPO No. 0 437 190	Issue Date October 9, 1996
United Kingdom	Patent No. EPO No. 0 437 190	Issue Date October 9, 1996
Japan	Application No. No. 3-11711	Filing Date January 9, 1991
Korea	Patent No. No. 152533	Issue Date June 29, 1998

7. INVENTION REFERENCE NUMBER 32-I-01

Title "Command Modulation System Having Command Generator Unit for Commanding a Plurality of Different Types of Controlled Units"

Country of Filing
United States

Patent No.
Pat. No. 5,384,845

Issue Date
January 24, 1995

8. INVENTION REFERENCE NUMBER 33-I-01

Title "Method and System for Projecting Steady State Conditions of a Product from Transient Monotonic or Cyclic Data"

Country of Filing
United States

Patent No.
No. 5,424,962

Issue Date
June 13, 1995

Canada

Patent No.
No. 2,157,113

Issue Date
June 8, 1999

European Patent Office

Application No.
No. 95 910 858.0

Filing Date
December 29, 1994

Publication No.
No. 0692126

Pub. Date
January 17, 1996

Japan

Patent No.
No. 3,167,032

Issue Date
March 9, 2001

9. INVENTION REFERENCE NUMBER 33-I-02

Title "Burst Tone Range Processing System & Method"

Country of Filing

United States

Patent No.

No. 5,515,056

Issue Date

May 7, 1996

Canada

Patent No.

No. 2145525

Issue Date

March 4, 1997

France

Patent No.

EPO No. 0 664 009

Issue Date

April 26, 2000

Germany

Patent No.

EPO No. 0 664 009

Issue Date

April 26, 2000

United Kingdom

Patent No.

EPO No. 0 664 009

Issue Date

April 26, 2000

Japan

Application No.

No. 506533/95

Filing Date

April 5, 1995

Publication No.

502.592/96

Pub. Date

March 19, 1996

10. INVENTION REFERENCE NUMBER 34-C-01

Title "Apparatus and Method for Operating a Heat Pipe Panel Assembly"

Country of Filing Canada	Application No. No. 2,255,708	Filing Date November 16, 1998
China	Application No. No. 97 1 95367.8	Filing Date April 10, 1997
	Publication No No. CN 1221380A	Pub. Date June 30, 1999
France	Application No. EPO No. 97 92 0022.7	Filing Date October 27, 1998
Italy	Application No. EPO No. 97 92 0022.7	Filing Date October 27, 1998
Germany	Application No. EPO No. 97 92 0022.7	Filing Date October 27, 1998
United Kingdom	Application No. EPO No. 97 92 0022.7	Filing Date October 27, 1998
India	Application No. No. 667CAL97	Filing Date April 17, 1997
Japan	Application No. No. PCT/US97/05359	Filing Date 10 April 1997
Russia	Application No. No. 99100049	Filing Date December 4, 1998

11. INVENTION REFERENCE NUMBER 40-I-01

Title "A Satellite Based Content Distribution System Using IP Multicast Technology"

Country of Filing United States	Application No. No. 09/813144	Filing Date 21 March 2001
---	---	-------------------------------------