

1 Charles K. Verhoeven (Bar No. 170151)
charlesverhoeven@quinnemanuel.com
2 Sean S. Pak (Bar No. 219032)
seanpak@quinnemanuel.com
Eric E. Wall (Bar No. 248692)
3 ericwall@quinnemanuel.com
QUINN EMANUEL URQUHART &
4 SULLIVAN, LLP
50 California Street, 22nd Floor
San Francisco, California 94111
5 Telephone: (415) 875-6600
Facsimile: (415) 875-6700

6 Yury Kapgan (Bar No. 218366)
yurykapgan@quinnemanuel.com
7 Vincent M. Pollmeier (Bar No. 210684)
vincentpollmeier@quinnemanuel.com
8 Adam B. Wolfson (Bar No. 262125)
adamwolfson@quinnemanuel.com
9 QUINN EMANUEL URQUHART &
SULLIVAN, LLP
10 865 S Figueroa Street 10th Floor
Los Angeles, California 90017
11 Telephone: (213) 443-3000
Facsimile: (213) 443-3100

12 *Attorneys for Plaintiffs ViaSat, Inc. and ViaSat*
Communications, Inc. f/k/a WildBlue
13 *Communications, Inc.*

William Christopher Carmody (*pro hac vice*)
Jacob W. Buchdahl (*pro hac vice*)
SUSMAN GODFREY L.L.P.
560 Lexington Avenue, 15th Floor
New York, New York 10022
Telephone: (212) 336-8330
Facsimile: (212) 336-8340
Email: bcarmody@susmangodfrey.com
Email: jbuchdahl@susmangodfrey.com

Marc M. Seltzer (54534)
Amanda K. Bonn (270891)
SUSMAN GODFREY L.L.P.
1901 Avenue of the Stars, Suite 950
Los Angeles, CA 90067-6029
Telephone: (310) 789-3100
Fax: (310) 789-3150
Email: mseltzer@susmangodfrey.com
Email: abonn@susmangodfrey.com

Joseph S. Grinstein (*pro hac vice*)
SUSMAN GODFREY L.L.P.
1000 Louisiana Street, Suite 5100
Houston, Texas 77002
Telephone: (713) 651-9366
Facsimile: (713) 654-6666

[additional counsel on signature page]

Attorneys for Defendants Space Systems/Loral,
Inc. and Loral Space & Communications Inc.

15 UNITED STATES DISTRICT COURT
16 SOUTHERN DISTRICT OF CALIFORNIA

17 VIASAT, INC.,
VIASAT COMMUNICATIONS, INC., f/k/a
18 WILDBLUE COMMUNICATIONS, INC.,

19 Plaintiffs,

20 vs.

21 SPACE SYSTEMS/LORAL, INC.,
LORAL SPACE & COMMUNICATIONS
INC.,

22 Defendants.

CASE NO. 3:12-cv-00260-H-WVG

**JOINT CLAIM CONSTRUCTION
CHART, JOINT CLAIM
CONSTRUCTION WORKSHEET AND
JOINT CLAIM CONSTRUCTION
HEARING STATEMENT**

1 Pursuant to paragraphs 7(a)-(c) of the Second Amended Case Management
2 and Patent Local Rule 4.2, Plaintiffs ViaSat, Inc. and ViaSat Communications, Inc.
3 (collectively “ViaSat”) and Defendants Space Systems/Loral, Inc. (“SS/L”) and
4 Loral Space & Communications Inc. (“Loral”) hereby file their Joint Claim
5 Construction Chart, Joint Claim Construction Worksheet, and Joint Claim
6 Construction Hearing Statement.

7 **I. IDENTIFICATION OF TERMS**

8 The terms to be construed are identified in the Joint Claim Construction
9 Chart, attached hereto as Exhibit A, and the Claim Construction Worksheet,
10 attached hereto as Exhibit B and separately provided in Word and WordPerfect
11 format to the Court.

12 From among these term, pursuant to Patent Local Rule 4.2(a), the parties
13 jointly define the following terms as being among the ten which are most
14 significant:

- 15 1) "feeder beam" ('875 Patent)
- 16 2) "feeder beam coverage area" ('875 Patent")
- 17 3) “circuitry configured to establish an activated frequency mode . . .
18 based on information indicating a presence or an absence of an
19 interference situation with an NGSO satellite system” ('827 Patent)
- 20 4) “NGSO frequency spectrum” ('827 Patent)

1 5) “at least one selector on said satellite [switch, disposed on said
2 satellite, that is] configured to selectively couple ... in response to
3 detection of propagation loss“ ('942 Patent)

4 6) "cache" ('808 Patent)

5 SS/L has identified the following terms to be included among the ten most
6 significant:

7 7) "proximate" ('875 Patent)

8 8) "data transmission system" ('808 Patent)

9 ViaSat has identified the following terms to be included among the ten most
10 significant:

11 9) "splitter" ('942 Patent)

12 10) "data broadcast" ('808 Patent)

13 The parties have agreed to address the indefiniteness claims identified in
14 Loral’s Motion for Summary Judgment of Invalidity of the Asserted Claims of
15 ViaSat’s ‘827 patent, filed on April 15, 2013, in said Motion and related briefing
16 and will not address these claims during the claim construction briefing or hearing.
17 The parties reserve the right to raise any indefiniteness claims previously identified
18 by the parties, for example in each parties’ respective Amended Invalidity
19 Contentions filed on April 1, 2013, at a later date.

1 **II. HEARING TIMING AND LOGISTICS**

2 The parties believe that the Claim Construction Hearing will require
3 approximately three hours, and the parties also have agreed to not call any expert
4 witnesses at the Hearing. The parties propose that Hearing consider the claim terms
5 on a patent-by-patent, term-by-term basis, with the possible option of combining the
6 argument on related terms. The parties propose that argument should start with the
7 ViaSat asserted patents and the party asserting the patent will go first for each term
8 to be followed by the opposing party.

1
2 DATED: April 17, 2013

Respectfully submitted,

3
4 By s/ Ian B. Crosby

By s/ Sean S. Pak

5 William Christopher Carmody (*pro hac vice*)
Jacob W. Buchdahl (*pro hac vice*)
SUSMAN GODFREY L.L.P.
6 560 Lexington Avenue, 15th Floor
New York, New York 10022
7 Telephone: (212) 336-8330
Facsimile: (212) 336-8340
Email: bcarmody@susmangodfrey.com
8 Email: jbuchdahl@susmangodfrey.com

9 Marc M. Seltzer (54534)
Amanda K. Bonn (270891)
SUSMAN GODFREY L.L.P.
10 1901 Avenue of the Stars, Suite 950
Los Angeles, CA 90067-6029
Telephone: (310) 789-3100
11 Fax: (310) 789-3150
Email: mseltzer@susmangodfrey.com
Email: abonn@susmangodfrey.com

12 Joseph S. Grinstein (*pro hac vice*)
SUSMAN GODFREY L.L.P.
13 1000 Louisiana Street, Suite 5100
Houston, Texas 77002
14 Telephone: (713) 651-9366
Facsimile: (713) 654-6666

15 Ian B. Crosby (*pro hac vice*)
SUSMAN GODFREY L.L.P.
16 1201 Third Avenue
Suite 3800
Seattle, Washington 98101
17 Telephone: (206) 516-3861
Facsimile: (206) 516-3883

18 *Attorneys for Defendants Space Systems/Loral,*
19 *Inc. and Loral Space & Communications Inc.*

Charles K. Verhoeven (Bar No. 170151)
charlesverhoeven@quinnemanuel.com
Sean S. Pak (Bar No. 219032)
seanpak@quinnemanuel.com
Eric E. Wall (Bar No. 248692)
ericwall@quinnemanuel.com
QUINN EMANUEL URQUHART &
SULLIVAN, LLP
50 California Street, 22nd Floor
San Francisco, California 94111
Telephone: (415) 875-6600
Facsimile: (415) 875-6700

Fred G. Bennett (Bar No. 059135)
fredbennett@quinnemanuel.com
Vincent M. Pollmeier (Bar No. 210684)
vincentpollmeier@quinnemanuel.com
Adam B. Wolfson (Bar No. 262125)
adamwolfson@quinnemanuel.com
QUINN EMANUEL URQUHART &
SULLIVAN, LLP
865 S Figueroa Street 10th Floor
Los Angeles, California 90017
Telephone: (213) 443-3000
Facsimile: (213) 443-3100

Attorneys for Plaintiffs ViaSat, Inc. and ViaSat
Communications, Inc. f/k/a WildBlue
Communications, Inc.

ATTESTATION

I attest under penalty of perjury that the concurrence in the filing of this document has been obtained from its signatory.

Dated: April 17, 2013

QUINN EMANUEL URQUHART &
SULLIVAN, LLP

By: s/ Sean S. Pak
Sean S. Pak
*Attorneys for Plaintiffs ViaSat, Inc.
and ViaSat Communications, Inc.
f/k/a WildBlue Communications, Inc.*

Exhibit A

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
"spot beam" <u>U.S. Patent No. 8,107,875</u> <u>Claim 1</u> 1. A spot beam satellite comprising: an antenna system configured to create a beam pattern having a plurality of different colors, wherein a color has a unique combination of frequency band and polarization, the spot beam satellite being configured to receive data from a plurality of service beams and from at least one feeder beam, each service beam having an associated service beam coverage area and the at least one feeder beam having an	"A satellite transmission that is focused on a compact geographical area"	'875 patent, 1:47-51; 2:9-11; 4:59-62; 13:18-65; 13:66-13:4.	<u>Wiley Electrical and Electronics Engineering Dictionary</u>, John Wiley & Sons, Inc. at 64. VST00762564 8. <u>Dictionary of Communications Technology</u> at 410. VST00762652 .	ViaSat does not believe that the proposed constructions of this term are dispositive as to infringement or validity.	"a focusing of electromagnetic radiation to permit communication with devices in a particular region"	1:47-51 2:7-25 2:26-45 4:59-63 7:14-31 8:50-53 10:1-13 10:14-22 10:42-47 13:54-57 15:15-18 16:4-10 Figure 6A Figure 11	Webster's New World Telecom Dictionary (2008), at p. 456. [SSL0158612 – SSL0158614] Harry Newton, <i>Newton's Telecom Dictionary</i> (23rd ed. 2007), at p. 867 [SSL0102474 – SSL0102478] <i>Gartner IT Glossary</i>, http://www.gartner.com/it-glossary/spot-beam/ [SSL0102483] National Telecommunications and Information Administration (NTIA), Department of Commerce, Institute of Telecommunications Services, http://www.its.bldrdoc.gov/fs-1037/dir-034/_5053.htm [SSL0102462] Timothy Pratt & Charles W. Bostian, <i>Satellite Communications</i>	The construction of this term could potentially impact the applicability of certain prior art references that SS/L has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
associated feeder beam coverage area, wherein the feeder beam coverage area is proximate to one or more of the service beam coverage areas, wherein the at least one feeder beam and a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area are allocated different colors from the beam pattern, such that signals associated with different colors differ by a frequency band, a polarization, or both a frequency band and a polarization, wherein the feeder beam coverage area is							(1986), at pp. 78-79 & Fig. 3.17 [SSL0102479 – SSL0102482] Bruce R. Elbert, <i>Introduction to Satellite Communication</i> (1999), at pp. 50-52, 243 & Figs 2.5, 2.6, 6.10 [SSL0102463 – SSL0102469] '043 patent, 1:40-46	

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
not proximate to one or more of the service beam coverage areas, and wherein a set of colors allocated to a service beam associated with each of the one or more service beam coverage areas not proximate to the feeder beam coverage area includes at least one same color allocated to the at least one feeder beam, such that signals associated with the same color have the same frequency band and polarization. <u>Claim 2</u> 2. The spot beam satellite of claim 1 wherein the spot beam satellite includes a directional								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
antenna for receiving the plurality of service beams and the at least one feeder beam, and wherein the satellite is configured to identify signals received from the service beams and the at least one feeder beam using the direction from which the beams originate and the color of the beam. <u>Claim 4</u> 4. The spot beam satellite of claim 1 wherein if a first service beam coverage area associated with a first service beam is proximate to a second service beam coverage area associated with a second service beam, the first service beam is allocated a first								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
set of colors from the beam pattern and the second service beam is allocated a second set of colors from the beam pattern, wherein the first set and second set are disjoint sets. <u>Claim 5</u> 5. The spot beam satellite of claim 1 wherein if a first service beam coverage area associated with a first service beam is not proximate to a second service beam coverage area associated with a second service beam, both the first service beam and the second service beam are allocated a same set of colors from the beam pattern. <u>Claim 6</u> 6. The spot beam								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
satellite of claim 1 wherein the service beams comprise an uplink component and a downlink component, and the uplink and downlink components are assigned different frequencies. <u>Claim 7</u> 7. The spot beam satellite of claim 6 wherein the satellite is configured to convert a received signal from the uplink component from a first frequency associated with the uplink to a second frequency associated with the downlink. <u>Claim 8</u> 8. The spot beam satellite of claim 1 wherein the at least one feeder								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
beam further comprises an uplink feeder beam having at least one common frequency channel and a downlink feeder beam having at least one common frequency channel, wherein the at least one common frequency channel associated with the uplink feeder beam employs a first frequency range and the at least one common frequency channel associated with the downlink feeder beam employs a second frequency range, and wherein the first frequency range is different than the second frequency range. <u>Claim 9</u> 9. The spot beam								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
satellite of claim 8 wherein the satellite is configured to convert a received signal from the uplink component from a first frequency associated with the uplink to a second frequency associated with the downlink. <u>Claim 12</u> 12. The spot beam satellite of claim 1 wherein the satellite is configured to receive data from a second at least one feeder beam, the second at least one feeder beam being associated with a second feeder beam coverage area, wherein the second feeder beam coverage area is not proximate to any								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
of the service beam coverage areas, and wherein the second at least one feeder beam is allocated all of the colors of the beam pattern. <u>Claim 27</u> 27. The spot beam satellite of claim 1 wherein a set of colors allocated to the at least one feeder beam includes all colors from the beam pattern not allocated to a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area. <u>Claim 29</u> 29. The spot beam satellite of claim 1 wherein								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
the at least one feeder beam comprises two or more feeder beams that have at least partially overlapping feeder beam coverage areas.								
"service beam" <u>U.S. Patent No. 8,107,875</u> <u>Claim 1</u> 1. A spot beam satellite comprising: an antenna system configured to create a beam pattern having a plurality of different colors, wherein a color has a unique combination of frequency band and polarization, the spot beam satellite being	"A transmission of information between the satellite and one or more subscriber terminals in one of the plurality of service beam coverage areas"	'875 patent, 3:60-64; 5:11-13; 5:46-50; 7:1-7 & Figure 12B; 15:5-15 & Figure 14.	<u>Wiley Electrical and Electronics Engineering Dictionary</u>, John Wiley & Sons, Inc. at 64. VST00762648 .	ViaSat does not believe that the proposed constructions of this term are dispositive as to infringement or validity.	"a focusing of electromagnetic radiation to permit communication of information between the satellite and one or more user or customer terminals"	3:65-66 5:11-28 10:51-58 14:51-52 15:5-6 15:12-15 15:34-37 Figure 1A Figure 1B	U.S. Patent No. 5,612,701, at 4:9-18 [SSL0102484 – SSL0102502] <i>Application of Lockheed Martin Corporation for Authority to Launch and Operate a Global Satellite Communications System in Geostationary Orbit</i> (1997), at 25 [SSL0083725 – SSL0083910]	The construction of this term could potentially impact the applicability of certain prior art references that SS/L has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
configured to receive data from a plurality of service beams and from at least one feeder beam, each service beam having an associated service beam coverage area and the at least one feeder beam having an associated feeder beam coverage area, wherein the feeder beam coverage area is proximate to one or more of the service beam coverage areas, wherein the at least one feeder beam and a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area are allocated different colors								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
from the beam pattern, such that signals associated with different colors differ by a frequency band, a polarization, or both a frequency band and a polarization, wherein the feeder beam coverage area is not proximate to one or more of the service beam coverage areas, and wherein a set of colors allocated to a service beam associated with each of the one or more service beam coverage areas not proximate to the feeder beam coverage area includes at least one same color allocated to the at least one feeder beam, such that signals associated								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
with the same color have the same frequency band and polarization. <u>Claim 2</u> 2. The spot beam satellite of claim 1 wherein the spot beam satellite includes a directional antenna for receiving the plurality of service beams and the at least one feeder beam, and wherein the satellite is configured to identify signals received from the service beams and the at least one feeder beam using the direction from which the beams originate and the color of the beam. <u>Claim 4</u> 4. The spot beam								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
satellite of claim 1 wherein if a first service beam coverage area associated with a first service beam is proximate to a second service beam coverage area associated with a second service beam, the first service beam is allocated a first set of colors from the beam pattern and the second service beam is allocated a second set of colors from the beam pattern, wherein the first set and second set are disjoint sets. <u>Claim 5</u> 5. The spot beam satellite of claim 1 wherein if a first service beam coverage area associated with a first								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
service beam is not proximate to a second service beam coverage area associated with a second service beam, both the first service beam and the second service beam are allocated a same set of colors from the beam pattern. <u>Claim 6</u> 6. The spot beam satellite of claim 1 wherein the service beams comprise an uplink component and a downlink component, and the uplink and downlink components are assigned different frequencies. <u>Claim 12</u> 12. The spot beam satellite of claim 1 wherein the satellite is								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
configured to receive data from a second at least one feeder beam, the second at least one feeder beam being associated with a second feeder beam coverage area, wherein the second feeder beam coverage area is not proximate to any of the service beam coverage areas, and wherein the second at least one feeder beam is allocated all of the colors of the beam pattern. <u>Claim 27</u> 27. The spot beam satellite of claim 1 wherein a set of colors allocated to the at least one feeder beam includes all colors from the beam pattern not								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
allocated to a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage								
"feeder beam" <u>U.S. Patent No. 8,107,875</u> <u>Claim 1</u> 1. A spot beam satellite comprising: an antenna system configured to create a beam pattern having a plurality of different colors, wherein a color has a unique combination of frequency band and polarization, the spot beam satellite being configured to	“A transmission between the satellite and a gateway containing information that is received from or relayed to subscriber terminals in the plurality of service beam coverage areas”	’875 patent, title; abstract; 1:37-40; 2:1-6;2:13-15; 3:60-64; 3:64-65; 4:19-28; 4:39-41 & Figures 1A, 1B; 4:42-46; 4:62-5:3; 6:38-45 & Figure 12A; 6:51-56; 6:57-67; 7:32-47; 8:24-35 & Figure 3; 8:50-55 & Figure 11; 8:61-9:3, & Figure 10;	U.S. Patent 7,790,070 (VST0076113 4-44) at 1:48-52; 1:61-2:3; 3:38-43; 3:49-4:5; 4:6-20; 4:23-46; 5:44-6:17; & Claim 1. U.S. Patent 6,317,420 (VST0230901 1-033) at Fig. 4 and 9:35-46 8/8/2007 Patent Application 11/891,086 (VST0076121 7-51)	ViaSat does not believe that the proposed constructions of this term are dispositive as to infringement or validity.	“a focusing of electromagnetic radiation to permit communication between a satellite and one or more network interfacing terminals”	3:58-64 4:19-28 7:32-33 7:42-47 15:12-15 Figure 1A Figure 1B Figure 2A	ESA study on S-UMTS, at 4. [SSL0158615 – SSL0158624]	The construction of this term could potentially impact the applicability of certain prior art references that SS/L has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiffs' Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
receive data from a plurality of service beams and from at least one feeder beam , each service beam having an associated service beam coverage area and the at least one feeder beam having an associated feeder beam coverage area, wherein the feeder beam coverage area is proximate to one or more of the service beam coverage areas, wherein the at least one feeder beam and a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area are allocated different colors from the beam		9:57-10:13 & Figure 5; 12:34-48 & Figures 1A, 1B; 13:18-65 & Figure 6B; 14:9-14; 14:19-31 & Figures 6A, 6B; 14:32-38 & Figure 14; 14:32-15:50 & Figure 14; 14:5-15:61; 15:63-16:62; 20:25-22:63; Figure 16.	8/4/2007 Issue Information and Examiner's Amendment Communication for Patent Application 11/891,086 (VST0076117 1-78) 8/23/2010 Continuation of Patent Application 11/891,086 (VST0076153 3-71). U.S. Patent Publication No. 2002/0187747 (SSL0154422-437) at Para. 0006. <u>VSAT Networks</u> , Maral, Gerard, Second Edition, John Wiley & Sons, Ltd., 2003 at 1-9.					

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
pattern, such that signals associated with different colors differ by a frequency band, a polarization, or both a frequency band and a polarization, wherein the feeder beam coverage area is not proximate to one or more of the service beam coverage areas, and wherein a set of colors allocated to a service beam associated with each of the one or more service beam coverage areas not proximate to the feeder beam coverage area includes at least one same color allocated to the at least one feeder beam , such that signals associated with the same			(VST0222202 8-036). <u>Wiley Electrical and Electronics Engineering Dictionary</u> , John Wiley & Sons, Inc. at 64. VST00762648 . Asato, et. al: A High-Capacity, Anti-Jam EHF "Bent-Pipe" Satellite/Central-Hub System Architecture Concept." SSL0085064-66.					

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
color have the same frequency band and polarization. <u>Claim 2</u> 2. The spot beam satellite of claim 1 wherein the spot beam satellite includes a directional antenna for receiving the plurality of service beams and the at least one feeder beam, and wherein the satellite is configured to identify signals received from the service beams and the at least one feeder beam using the direction from which the beams originate and the color of the beam. <u>Claim 8</u> 8. The spot beam satellite of claim								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
1 wherein the at least one feeder beam further comprises an uplink feeder beam having at least one common frequency channel and a downlink feeder beam having at least one common frequency channel, wherein the at least one common frequency channel associated with the uplink feeder beam employs a first frequency range and the at least one common frequency channel associated with the downlink feeder beam employs a second frequency range, and wherein the first frequency range is different than the second frequency range.								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
<u>Claim 12</u> 12. The spot beam satellite of claim 1 wherein the satellite is configured to receive data from a second at least one feeder beam , the second at least one feeder beam being associated with a second feeder beam coverage area, wherein the second feeder beam coverage area is not proximate to any of the service beam coverage areas, and wherein the second at least one feeder beam is allocated all of the colors of the beam pattern.								
<u>Claim 27</u> 27. The spot beam satellite of claim 1 wherein a set of colors								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
allocated to the at least one feeder beam includes all colors from the beam pattern not allocated to a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area. <u>Claim 29</u> 29. The spot beam satellite of claim 1 wherein the at least one feeder beam comprises two or more feeder beams that have at least partially overlapping feeder beam coverage areas.								
"feeder beam coverage area"	"A portion of the total	'875 patent, title; abstract;	U.S. Patent 7,790,070 (Bates	ViaSat does not believe that the	"the portion of the earth's surface	Abstract 1:45-51		The construction of this term

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
U.S. Patent No. 8,107,875 <u>Claim 1</u> 1. A spot beam satellite comprising: an antenna system configured to create a beam pattern having a plurality of different colors, wherein a color has a unique combination of frequency band and polarization, the spot beam satellite being configured to receive data from a plurality of service beams and from at least one feeder beam, each service beam having an associated service beam coverage area and the at least one feeder beam having an associated feeder beam coverage	coverage area allocated for the gateway associated with the feeder beam”	4:43-46; 7:32-41 & Figure 2A, 2B; 14:5-15:61; 15:63-16:62; 20:25-22:63; Figure 16.	VST00761134 -44) at 1:48-52; 1:61-2:3; 3:38-43; 3:49-4:5; 4:6-20; 4:23-46; 5:44-6:17; & Claim 1 8/8/2007 Patent Application 11/891,086 (VST00761217-51). 8/4/2007 Issue Information and Examiner’s Amendment Communication for Patent Application 11/891,086 (Bates VST00761171-78). 8/23/2010 Continuation of Patent Application 11/891,086 (Bates VST00761533-71).	proposed constructions of this term are dispositive as to infringement or validity.	associated with a feeder beam”	5:15-17 7:42-47		could potentially impact the applicability of certain prior art references that SS/L has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
area , wherein the feeder beam coverage area is proximate to one or more of the service beam coverage areas, wherein the at least one feeder beam and a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area are allocated different colors from the beam pattern, such that signals associated with different colors differ by a frequency band, a polarization, or both a frequency band and a polarization, wherein the feeder beam coverage area is not proximate to one or more of								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
the service beam coverage areas, and wherein a set of colors allocated to a service beam associated with each of the one or more service beam coverage areas not proximate to the feeder beam coverage area includes at least one same color allocated to the at least one feeder beam, such that signals associated with the same color have the same frequency band and polarization. <u>Claim 12</u> 12. The spot beam satellite of claim 1 wherein the satellite is configured to receive data from a second at least one feeder beam,								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
the second at least one feeder beam being associated with a second feeder beam coverage area, wherein the second feeder beam coverage area is not proximate to any of the service beam coverage areas, and wherein the second at least one feeder beam is allocated all of the colors of the beam pattern. <u>Claim 27</u> 27. The spot beam satellite of claim 1 wherein a set of colors allocated to the at least one feeder beam includes all colors from the beam pattern not allocated to a service beam associated with each of the one or								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
more service beam coverage areas proximate to the feeder beam coverage area. <u>Claim 29</u> 29. The spot beam satellite of claim 1 wherein the at least one feeder beam comprises two or more feeder beams that have at least partially overlapping feeder beam coverage areas.								
“proximate” <u>U.S. Patent No. 8,107,875</u> Claim 1 1. A spot beam satellite comprising: an antenna system configured to	“Separated by a distance such that allocated coverage areas are at least partially overlapping”	’875 patent, 7:22-31 & Figures 2A, 2B; 7:32-41 & Figure 2B; 15:63-16:3; 16:4-20; 14:5-15:61; 15:63-16:62; 20:25-		ViaSat does not believe that the proposed constructions of this term are dispositive as to infringement or validity.	“insufficiently separated to permit color re-use”	2:17-25 2:36-45 7:14-31 15:46-61 16:31-34 20:31-40	ViaSat 9/6/12 Preliminary Infringement Contentions, Ex. B, at 3 Ozlem Kilic and Amir I. Zaghloul, <i>Interference in Cellular Satellite Systems</i> (2009) at pp. 304-310. [SSL0180033 – SSL0180057]	The construction of this term could potentially impact the applicability of certain prior art references that SS/L has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
create a beam pattern having a plurality of different colors, wherein a color has a unique combination of frequency band and polarization, the spot beam satellite being configured to receive data from a plurality of service beams and from at least one feeder beam, each service beam having an associated service beam coverage area and the at least one feeder beam having an associated feeder beam coverage area, wherein the feeder beam coverage area is proximate to one or more of the service beam coverage areas, wherein the at least one feeder		22:63; Figure 16.				21:3 to 22:62 Figure 16		

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
beam and a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area are allocated different colors from the beam pattern, such that signals associated with different colors differ by a frequency band, a polarization, or both a frequency band and a polarization, wherein the feeder beam coverage area is not proximate to one or more of the service beam coverage areas, and wherein a set of colors allocated to a service beam associated with each of the one or more service								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
beam coverage areas not proximate to the feeder beam coverage area includes at least one same color allocated to the at least one feeder beam, such that signals associated with the same color have the same frequency band and polarization. <u>Claim 4</u> 4. The spot beam satellite of claim 1 wherein if a first service beam coverage area associated with a first service beam is proximate to a second service beam coverage area associated with a second service beam, the first service beam is allocated a first set of colors from the beam pattern								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
and the second service beam is allocated a second set of colors from the beam pattern, wherein the first set and second set are disjoint sets. <u>Claim 5</u> 5. The spot beam satellite of claim 1 wherein if a first service beam coverage area associated with a first service beam is not proximate to a second service beam coverage area associated with a second service beam, both the first service beam and the second service beam are allocated a same set of colors from the beam pattern. <u>Claim 12</u> 12. The spot beam satellite of claim 1 wherein								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
the satellite is configured to receive data from a second at least one feeder beam, the second at least one feeder beam being associated with a second feeder beam coverage area, wherein the second feeder beam coverage area is not proximate to any of the service beam coverage areas, and wherein the second at least one feeder beam is allocated all of the colors of the beam pattern. <u>Claim 27</u> 27. The spot beam satellite of claim 1 wherein a set of colors allocated to the at least one feeder beam includes all colors from the								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
beam pattern not allocated to a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area.								
“having at least one common frequency channel” <u>U.S. Patent No. 8,107,875</u> <u>Claim 8</u> 8. The spot beam satellite of claim 1 wherein the at least one feeder beam further comprises an uplink feeder beam having at least one common frequency channel and a	“Utilizing at least one same frequency band and polarization as that allocated to one of the service beams.”	’875 patent, 5:29-39; 7:48-58 & Figure 8; 7:60-67 & Figure 9; 8:12-23; 14:9-14; 20:44-45; 20:64-65.		ViaSat does not believe that the proposed constructions of this term are dispositive as to infringement or validity.	“utilizing at least one same frequency band as that allocated to a different beam”	14:6-18 14:45-56 Claim 21		The construction of this term could potentially impact the applicability of certain prior art references that SS/L has asserted. This term only impacts two dependent claims that ViaSat has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
downlink feeder beam having at least one common frequency channel , wherein the at least one common frequency channel associated with the uplink feeder beam employs a first frequency range and the at least one common frequency channel associated with the downlink feeder beam employs a second frequency range, and wherein the first frequency range is different than the second frequency range.								
“regular frequency re-use pattern” <u>U.S. Patent No. 8,010,043</u> <u>Claim 6</u>	No construction necessary or alternatively "a structured frequency re-use pattern"	‘043 Patent at 1:54-64; 13:61-63.		ViaSat does not believe that the proposed constructions of this term are dispositive as	“requiring the beams for each color to be uniformly distributed with a constant beam spacing”	13:61-63 3:1-5 Figure 3 Figure 4		The construction of this term potentially impacts whether the accused products

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
6. The satellite for illuminating a geographic area with signals of claim 1, wherein the beam pattern has a regular frequency re-use pattern .				to infringement or validity.		Figure 5 Figure 6 Figure 7 Figure 8		infringe. The construction of this term could potentially impact the applicability of certain prior art references that SS/L has asserted.
“NGSO frequency spectrum” U.S. Patent No. 8,068,827 Claim 7 7. A geostationary orbit (GSO), satellite comprising: a receiver configured to receive from one or more ground stations signals in a GSO frequency band and in an extended	“frequency band(s) allocated to NGSO satellite communication systems”	’827 patent at 1:36–49; 2:42–46; 2:63–3:1. ’827 Prosecution History August 25, 2009 Preliminary Amendment at 5–7.		ViaSat does not believe that the proposed constructions of this term are dispositive as to infringement or validity.	“a range of frequencies designated by legal authorities for primary use by non-geostationary satellites”	Abstract 1:40-49 2:1-7 2:20-34 2:42 to 3:9 3:35-47 4:11-16 5:19-26 7:58-67 8:32-47	Federal Communications Commission, <i>First Report and Order and Fourth Notice of Proposed Rulemaking</i> (July 17, 1996), at ¶42, subheading 2 above ¶57, ¶57, subheading 3 above ¶59, ¶59, ¶62, ¶77, ¶79, ¶82, & Appendix B. [SSL0102681 – SSL0102756] Federal Communications Commission, <i>Report and Order</i> (June 22,	The construction of this term potentially impacts whether the accused products infringe, especially with respect to its interplay with the NGSO frequency band term (as more fully set forth in

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
frequency spectrum, the extended frequency spectrum including the GSO frequency band and a non-geostationary orbit (NGSO) frequency band; circuitry configured to establish an activated frequency mode to activate one of a GSO frequency band mode and an extended frequency spectrum mode based on information indicating a presence or an absence of an interference situation with an NGSO satellite system; and a transmitter configured to transmit in one of the GSO						8:55-60 8:61-66 9:9-11 9:20-54 10:27-29 10:60-64 11:28-39 11:45-54 11:59 to 12:7 12:10-24 13:25-40 13:59 to 14:28 Figure 6 Figure 8A Figure 8B Claim 1 Claim 2	2000), at ¶20, ¶28, footnote 109, & ¶56 [SSL0102588 – SSL0102680] Federal Communications Commission, <i>Order and Authorization</i> (April 14, 2006), at ¶1 & footnote 3. [SSL0152005 – SSL0152033] EchoStar Satellite Corporation, <i>Petition for Rulemaking to Redesignate the Non-Geostationary Fixed Satellite Service Bands to Allow Geostationary Fixed-Satellite Service Operations on a Co-Primary Basis</i> , at 6. [SSL0102567 – SSL0102587] International Telecommunication Union, <i>Final Acts of the World Radiocommunication Conference (WRC-95) Geneva, 1995</i> , ITU (1996), p. 21-22, 620-623, 680-681	SS/L's motion for summary judgment of the indefiniteness of the claims of the '827 patent).

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
frequency band and in the NGSO frequency spectrum based on the activated frequency spectrum mode						Claim 3 Claim 4 Claim 10 Claim 11	[SSL0102893 – SSL0102903]	
“circuitry configured to establish an activated frequency mode . . . based on information indicating the presence or an absence of an interference situation with an NGSO satellite system” <u>U.S. Patent No. 8,068,827</u> Claim 7 7. A geostationary orbit (GSO), satellite comprising: a receiver configured to	No construction necessary or alternatively “circuitry configured to select one or more appropriate frequency band(s) during the presence or absence of an interference situation with an NGSO satellite system”	’827 patent at 2:47–62; 3:16–20; 3:28–35; Fig. 1; 5:10–14; 6:3–17; 6:39–63; 7:58–67; 8:66–9:5; 9:11–18; 9:47–54; 11:1–27; 12:35–13:24; Fig. 7; 13:25–40.		ViaSat does not believe that the proposed constructions of this term are dispositive as to infringement or validity.	“A control device that uses orbital information to select one or more appropriate frequency band(s) during the presence or absence of an interference situation” Alternatively, the claim term “information indicating a presence or an absence of an interference situation” is indefinite.	7:7-11 7:58-67 8:39-47 9:11-17 9:29-32 11:28-31 12:39-46 13:25-40	ViaSat, Inc., et al., <i>Third Amended Complaint for Patent Infringement</i> , Dkt. No. 88, ¶¶ 25 & 26	The construction of this term potentially impacts whether the accused products infringe and whether the “circuitry” limitation is indefinite (as more fully set forth in SS/L’s motion for summary judgment of the indefiniteness of the claims of the ‘827 patent).

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
receive from one or more ground stations signals in a GSO frequency band and in an extended frequency spectrum, the extended frequency spectrum including the GSO frequency band and a non-geostationary orbit (NGSO) frequency band; circuitry configured to establish an activated frequency mode to activate one of a GSO frequency band mode and an extended frequency spectrum mode based on information indicating a presence or an absence of an interference								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
situation with an NGSO satellite system; and a transmitter configured to transmit in one of the GSO frequency band and in the NGSO frequency spectrum based on the activated frequency spectrum mode.								
“operational gateway” U.S. Patent No. 7,773,942 <u>Claim 1</u> 1. A satellite communications system that provides a redundant communication path for communications data that is transmitted between a satellite and a	“a gateway terminal designed and used as the default gateway terminal in a specified region of a satellite communications system”	’942 patent at 12:47-59; 12:60-13:1; 13:56-14:3.		ViaSat does not believe that the proposed constructions of this term are dispositive as to infringement or validity.	“a network interfacing terminal designated and being used to provide communication capacity to a satellite system”	8:27-49 8:57-58 9:17-19 12:47-57 12:60-64 13:1-3 13:6-11 13:24-35 13:56-59 Figure 10A		SS/L does not believe that the construction of this term will have a significant impact on the merits of the case, except to the extent that an improper construction could lead to juror confusion.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
plurality of ground stations by providing at least one backup, earth-based, utility gateway for backing up multiple earth-based operational gateways comprising: a first microwave radiator configured to direct a first set of microwave signals to a first earth-based operational gateway that comprises one of said multiple earth-based operational gateways, said first set of microwave signals carrying a first subset of said communications data from a first user terminal located in spot beam coverage						Figure 10B Figure 10C		

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
region; a first signal splitter configured to collect at least a portion of said first subset of said communications data from said first user terminal; a second microwave radiator configured to direct a second set of microwave signals to a second earth-based operational gateway that comprises one of said multiple earth-based operational gateways , said second set of microwave signals carrying a second subset of said communications data from a second user terminal; a second splitter configured								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
to collect at least a portion of said second subset of said communications data from said second user terminal; a third microwave radiator configured to direct a selected one of said first set of microwave signals and said second set of microwave signals to said at least one backup, earth-based, utility gateway; and at least one selector on said satellite configured to selectively couple said third microwave radiator to a selected one of said first splitter and said second splitter in response to detection of								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
propagation loss of one of said first set of microwave signals and said second set of microwave signals, such that said selected one of said first set of microwave signals and said second set of microwave signals is directed by said third microwave radiator to carry communications data collected from said selected one of the said first splitter and said second splitter to said at least one backup, earth-based, utility gateway. Claim 7 7. A satellite communications system having at least one backup utility gateway for backing up								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
multiple operational gateways comprising: a first feed horn disposed on a satellite that is configured to direct a first set of microwave signals to a first operational earth-based gateway, that comprises one of said multiple operational gateways , said first set of microwave signals carrying a first set of communications data from a first user terminal located in a spot beam coverage region; a first directional coupler, that is disposed on said satellite, that is configured to collect at least a portion of said								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
first set of communications data from said first user terminal; a second feed horn, that is disposed on said satellite, that is configured to direct a second set of communications data to a second earth-based operational gateway that comprises one of said multiple operational gateways , said second set of microwave signals carrying a second set of communications data from a second user terminal; a second directional coupler, that is disposed on said satellite, that is configured to collect at least a portion of said								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
second set of communications data from the second user terminal; a third feed horn, that is disposed on said satellite, that is configured to direct a selected one of said first set of communications data and said second set of communications data to an earth-based, utility gateway that comprises one of said at least one backup, utility gateways; and at least one switch, disposed on said satellite, that is configured to selectively couple said third feed horn to a selected one of said first directional coupler and said second directional								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
coupler in response to detection of a propagation loss of one of said first set of communications data and said second set of communications data, such that said selected one of said first set of communications data and said second set of communications data is directed by said third feed horn, which carries said selected one of said first set of said communications data and said second set of said communications data, to said earth-based, utility gateway.								
"redundant	"a	'942 patent		ViaSat does	"an additional	13:24-35	<i>Chambers Dictionary of</i>	The

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
communications path” <u>U.S. Patent No. 7,773,942</u> <u>Claim 1</u> 1. A satellite communications system that provides a redundant communication path for communications data that is transmitted between a satellite and a plurality of ground stations by providing at least one backup, earth-based, utility gateway for backing up multiple earth-based operational gateways comprising: a first microwave radiator configured to direct a first set of	communications path that is omitted in the ordinary course without loss of system functionality”	at 12:60-64; 13:19-35.		not believe that the proposed constructions of this term are dispositive as to infringement or validity.	communications path that transmits a copy of the communications data”	14:47-54 Figure 10A Figure 10B Figure 10C	<i>Science and Technology</i>, Chambers Harrap Publishers Ltd., 1999, p. 971, “redundant” [SSL0102910 – SSL0102913] <i>The American Heritage Dictionary of the English Language</i>, Fourth Edition, Houghton Mifflin Company, 2000, p. 1465-6, “redundant” [SSL0102914 – SSL0102907] Christian Bachmeir, “Fault-Tolerant 2-tier P2P based Service Discovery in PIRST-ON” Technische Universität München, IEEE, 2003. [SSL0180010 – SSL0180016] B Devalla, R. Bettati and W. Zhao, “Fault Tolerant Real-Time Connection Admission Control for Mission Critical Applications over ATM-based	construction of this term potentially impacts whether the accused products infringe. The construction of this term could potentially impact the applicability of certain prior art references that SS/L has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
microwave signals to a first earth-based operational gateway that comprises one of said multiple earth-based operational gateways, said first set of microwave signals carrying a first subset of said communications data from a first user terminal located in spot beam coverage region; a first signal splitter configured to collect at least a portion of said first subset of said communications data from said first user terminal; a second microwave radiator configured to direct a second set of microwave signals to a							Networks,”IEEE 1999. [SSL0180017 – SSL0180024] Anh Phan Speer and Ing-Ray Chen, “On Optimal Path and Source Redundancy for Achieving QoS and Maximizing Lifetime of Query-Based Wireless Sensor Networks,” Proceedings of the 14th IEEE International Symposium on Modeling, Analysis, and Simulation of Computer and Telecommunication Systems (MASCOTS '06), 2006. [SSL0180025 – SSL0180032]	

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
second earth-based operational gateway that comprises one of said multiple earth-based operational gateways, said second set of microwave signals carrying a second subset of said communications data from a second user terminal; a second splitter configured to collect at least a portion of said second subset of said communications data from said second user terminal; a third microwave radiator configured to direct a selected one of said first set of microwave signals and said second set of								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
microwave signals to said at least one backup, earth-based, utility gateway; and at least one selector on said satellite configured to selectively couple said third microwave radiator to a selected one of said first splitter and said second splitter in response to detection of propagation loss of one of said first set of microwave signals and said second set of microwave signals, such that said selected one of said first set of microwave signals and said second set of microwave signals is directed by said third microwave								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
radiator to carry communications data collected from said selected one of the said first splitter and said second splitter to said at least one backup, earth-based, utility gateway.								
"utility gateway" <u>U.S. Patent No. 7,773,942</u> <u>Claim 1</u> 1. A satellite communications system that provides a redundant communication path for communications data that is transmitted between a satellite and a plurality of ground stations by providing at least one backup,	"a gateway terminal designed and used as a temporary replacement for a plurality of operational gateway terminals on an as-needed basis"	'942 patent at 4:1-7; 12:47-59; 12:60-13:1; 13:56-14:3.		ViaSat does not believe that the proposed constructions of this term are dispositive as to infringement or validity.	"a network interfacing terminal designated and being used for backing up multiple operational gateways"	12:60 - 13:5 13:6-11 13:24-35 13:46-49 13:56-59 14:26-32 14:34-54 16:5-16 Figure 10A Figure 10B Figure 10C		The construction of this term potentially impacts whether the accused products infringe. The construction of this term could potentially impact the applicability of certain prior art references that SS/L has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
earth-based, utility gateway for backing up multiple earth-based operational gateways comprising: a first microwave radiator configured to direct a first set of microwave signals to a first earth-based operational gateway that comprises one of said multiple earth-based operational gateways, said first set of microwave signals carrying a first subset of said communications data from a first user terminal located in spot beam coverage region; a first signal splitter configured to collect at least a								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
portion of said first subset of said communications data from said first user terminal; a second microwave radiator configured to direct a second set of microwave signals to a second earth-based operational gateway that comprises one of said multiple earth-based operational gateways, said second set of microwave signals carrying a second subset of said communications data from a second user terminal; a second splitter configured to collect at least a portion of said second subset of said								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
communications data from said second user terminal; a third microwave radiator configured to direct a selected one of said first set of microwave signals and said second set of microwave signals to said at least one backup, earth-based, utility gateway ; and at least one selector on said satellite configured to selectively couple said third microwave radiator to a selected one of said first splitter and said second splitter in response to detection of propagation loss of one of said first set of microwave signals and said								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
second set of microwave signals, such that said selected one of said first set of microwave signals and said second set of microwave signals is directed by said third microwave radiator to carry communications data collected from said selected one of the said first splitter and said second splitter to said at least one backup, earth-based, utility gateway. <u>Claim 7</u> 7. A satellite communications system having at least one backup utility gateway for backing up multiple operational gateways comprising: a first								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
feed horn disposed on a satellite that is configured to direct a first set of microwave signals to a first operational earth-based gateway, that comprises one of said multiple operational gateways, said first set of microwave signals carrying a first set of communications data from a first user terminal located in a spot beam coverage region; a first directional coupler, that is disposed on said satellite, that is configured to collect at least a portion of said first set of communications data from said first user								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
terminal; a second feed horn, that is disposed on said satellite, that is configured to direct a second set of communications data to a second earth-based operational gateway that comprises one of said multiple operational gateways, said second set of microwave signals carrying a second set of communications data from a second user terminal; a second directional coupler, that is disposed on said satellite, that is configured to collect at least a portion of said second set of communications data from the second user								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
terminal; a third feed horn, that is disposed on said satellite, that is configured to direct a selected one of said first set of communications data and said second set of communications data to an earth-based, utility gateway that comprises one of said at least one backup, utility gateways ; and at least one switch, disposed on said satellite, that is configured to selectively couple said third feed horn to a selected one of said first directional coupler and said second directional coupler in response to detection of a propagation loss								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
of one of said first set of communications data and said second set of communications data, such that said selected one of said first set of communications data and said second set of communications data is directed by said third feed horn, which carries said selected one of said first set of said communications data and said second set of said communications data, to said earth-based, utility gateway .								
"splitter"/"signal splitter" <u>U.S. Patent No. 7,773,942</u>	"circuitry which splits an electrical signal into two or more	'942 patent at 10:14-17; 13:37-41.	Steven M. Kaplan, <u>Wiley Electrical and Engineering</u>	ViaSat does not believe that the proposed constructions	"circuitry that takes an input signal and divides its power to two	10:2-6 10:14-20 12:2-5	Harry Newton, <i>Newton's Telecom Dictionary</i> (23rd ed. 2007), at p. 866. [SSL0102457 –	The construction of this term potentially impacts

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
<u>Claim 1</u> 1. A satellite communications system that provides a redundant communication path for communications data that is transmitted between a satellite and a plurality of ground stations by providing at least one backup, earth-based, utility gateway for backing up multiple earth-based operational gateways comprising: a first microwave radiator configured to direct a first set of microwave signals to a first earth-based operational gateway that	signals"		<u>Dictionary</u> , (2004) at p. 738. (VST0076276)	of this term are dispositive as to infringement or validity.	or more outputs so that the full data content of the input signals is available simultaneously in each of the output signals"	13:37-45 14:47-54 14:63-67 Figure 8 Figure 9 Figure 10A Figure 10B Figure 10C Claim 5	SSL0102461] Harry Newton, <i>Newton's Telecom Dictionary</i> , (20 th ed. 2004), at p. 773. [SSL0102536 – SSL0102540] A. M. Dhake, <i>Television and Video Engineering</i> (2d ed. 1995), at p. 535. [SSL0102517 – SSL0102519] Jonathan Higgins, <i>Satellite Newsgathering</i> (2000), at p. 453 [SSL0102776 – SSL0102778]. Jonathan Higgins, <i>Satellite Newsgathering</i> , (2d ed. 2007) [SSL0102523 – SSL0102524] <i>The Authoritative Dictionary of IEEE Standards Terms</i> , (7 th ed. 2000), at p. 1087. [SSL0102525 – SSL01025528] Daniel Minoli, <i>Satellite</i>	whether the accused products infringe. The construction of this term could potentially impact the applicability of certain prior art references that SS/L has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
comprises one of said multiple earth-based operational gateways, said first set of microwave signals carrying a first subset of said communications data from a first user terminal located in spot beam coverage region; a first signal splitter configured to collect at least a portion of said first subset of said communications data from said first user terminal; a second microwave radiator configured to direct a second set of microwave signals to a second earth-based operational gateway that comprises one of							<i>Systems Engineering in an IPv6 Environment</i>, (2009), at p. 32. [SSL0102533 – SSL01025535] Joseph N. Pelton, <i>The Basics of Satellite Communications</i> (2d ed. 2006), at p. 362. [SSL0102545 – SSL0102547] <i>Wiley Electrical & Electronics Engineering Dictionary</i>, IEEE Press (Steven M. Kaplan ed. 2004), at p. 738. [SSL0102562 – SSL0102566]	

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
said multiple earth-based operational gateways, said second set of microwave signals carrying a second subset of said communications data from a second user terminal; a second splitter configured to collect at least a portion of said second subset of said communications data from said second user terminal; a third microwave radiator configured to direct a selected one of said first set of microwave signals and said second set of microwave signals to said at least one backup, earth-based,								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
utility gateway; and at least one selector on said satellite configured to selectively couple said third microwave radiator to a selected one of said first splitter and said second splitter in response to detection of propagation loss of one of said first set of microwave signals and said second set of microwave signals, such that said selected one of said first set of microwave signals and said second set of microwave signals is directed by said third microwave radiator to carry communications data collected from said selected								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
one of the said first splitter and said second splitter to said at least one backup, earth-based, utility gateway. <u>Claim 5</u> 5. The system of claim 1 wherein at least one of said first splitter and second splitter comprise a directional coupler.								
“directional coupler” <u>U.S. Patent No. 7,773,942</u> <u>Claim 5</u> 5. The system of claim 1 wherein at least one of said first splitter and second splitter comprise a directional coupler.	“circuitry which couples two or more signal paths such that signals flow in a specified direction”	’942 patent at 13:37-41; 18:41-49.		ViaSat does not believe that the proposed constructions of this term are dispositive as to infringement or validity.	“circuitry that feeds the power of a signal in one direction to two outputs so that some signal power may be routed to a second location.”	10:2-6 10:14-20 12:2-5 13:37-45 14:47-54 14:63-67 Figure 8 Figure 9	Harry Newton, <i>Newton’s Telecom Dictionary</i> (23rd ed. 2007), at p. 315. [SSL0102457 – SSL0102461] <i>Newton’s Telecom Dictionary</i>, (20th ed. 2004), at p. 256. [SSL0102536 – SSL0102540] <i>Wiley Electrical & Electronics Engineering Dictionary</i>, IEEE Press	The construction of this term potentially impacts whether the accused products infringe. The construction of this term could potentially impact the applicability

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
<u>Claim 7</u> 7. A satellite communications system having at least one backup utility gateway for backing up multiple operational gateways comprising: a first feed horn disposed on a satellite that is configured to direct a first set of microwave signals to a first operational earth-based gateway, that comprises one of said multiple operational gateways, said first set of microwave signals carrying a first set of communications data from a first user terminal located in a spot beam coverage region; a first						Figure 10A Figure 10B Figure 10C Claim 5	(Steven M. Kaplan ed. 2004), at p. 198. [SSL0102562 – SSL0102566] A. M. Dhake, <i>Television and Video Engineering</i> (2d ed. 1995), at p. 535. [SSL0102517 – SSL0102519] Jon B. Hagen, <i>Radio-Frequency Electronics: Circuits and Applications</i> , (1996), at p. 189. [SSL0102520 – SSL0102522] F. Nibler, <i>High Frequency Circuit Engineering</i> , IEEE, (1996), at pp. 104-105. [SSL0102541 – SSL0102544] Sisodia and Raghuvanshi, <i>Basic Microwave Techniques and Laboratory Manual</i> (2004), at 6.1-6.3. [SSL0102551 – SSL0102553] <i>The IEEE Standard Dictionary of Electrical</i>	of certain prior art references that SS/L has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
directional coupler , that is disposed on said satellite, that is configured to collect at least a portion of said first set of communications data from said first user terminal; a second feed horn, that is disposed on said satellite, that is configured to direct a second set of communications data to a second earth-based operational gateway that comprises one of said multiple operational gateways, said second set of microwave signals carrying a second set of communications data from a second user terminal; a second							<i>Electronics Terms</i> , (Frank Jay ed., 2d ed. 1977), at p. 185 [SSL102529 – SSL0102532] Leo G. Maloratsky, <i>Passive RF and Microwave Integrated Circuits</i> (2003), at pp. 117, 167 [SSL0090936 – SSL0090939]. Annapurna Das & Sisir K. Das, <i>Microwave Engineering</i> (2000), at p. 190. [SSL0090933 – SSL0090935]	

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
directional coupler , that is disposed on said satellite, that is configured to collect at least a portion of said second set of communications data from the second user terminal; a third feed horn, that is disposed on said satellite, that is configured to direct a selected one of said first set of communications data and said second set of communications data to an earth-based, utility gateway that comprises one of said at least one backup, utility gateways; and at least one switch, disposed on said satellite, that is configured to selectively								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
couple said third feed horn to a selected one of said first directional coupler and said second directional coupler in response to detection of a propagation loss of one of said first set of communications data and said second set of communications data, such that said selected one of said first set of communications data and said second set of communications data is directed by said third feed horn, which carries said selected one of said first set of said communications data and said second set of said								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
communications data, to said earth-based, utility gateway.								
“at least one [selector/switch, disposed] on said satellite [that is] configured to selectively couple ... in response to detection of propagation loss” <u>U.S. Patent No. 7,773,942</u> <u>Claim 1</u> 1. A satellite communications system that provides a redundant communication path for communications data that is transmitted between a satellite and a plurality of ground stations by providing at	no construction needed	'942 patent, 4:1-7; 12:64-13:1; 13:24-33.		ViaSat does not believe that the proposed constructions of this term are dispositive as to infringement or validity.	“the selector performs the coupling in response to the selector discovering the propagation loss”	12:64 - 13:1 13:24-35 17:14-40 Figure 10A Figure 10B Figure 10C	<i>The American Heritage Dictionary of the English Language</i> , Fourth Edith, Houghton Mifflin Company, New York, 2000, pp. 494 and 1485. [SSL0158677 – SSL0158680]	The construction of this term potentially impacts whether the accused products infringe. The construction of this term could potentially impact the applicability of certain prior art references that SS/L has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
least one backup, earth-based, utility gateway for backing up multiple earth-based operational gateways comprising: a first microwave radiator configured to direct a first set of microwave signals to a first earth-based operational gateway that comprises one of said multiple earth-based operational gateways, said first set of microwave signals carrying a first subset of said communications data from a first user terminal located in spot beam coverage region; a first signal splitter configured to								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
collect at least a portion of said first subset of said communications data from said first user terminal; a second microwave radiator configured to direct a second set of microwave signals to a second earth-based operational gateway that comprises one of said multiple earth-based operational gateways, said second set of microwave signals carrying a second subset of said communications data from a second user terminal; a second splitter configured to collect at least a portion of said second subset of								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
said communications data from said second user terminal; a third microwave radiator configured to direct a selected one of said first set of microwave signals and said second set of microwave signals to said at least one backup, earth-based, utility gateway; and at least one selector on said satellite configured to selectively couple said third microwave radiator to a selected one of said first splitter and said second splitter in response to detection of propagation loss of one of said first set of microwave								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
signals and said second set of microwave signals, such that said selected one of said first set of microwave signals and said second set of microwave signals is directed by said third microwave radiator to carry communications data collected from said selected one of the said first splitter and said second splitter to said at least one backup, earth-based, utility gateway. <u>Claim 7</u> 7. A satellite communications system having at least one backup utility gateway for backing up multiple operational gateways								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
comprising: a first feed horn disposed on a satellite that is configured to direct a first set of microwave signals to a first operational earth-based gateway, that comprises one of said multiple operational gateways, said first set of microwave signals carrying a first set of communications data from a first user terminal located in a spot beam coverage region; a first directional coupler, that is disposed on said satellite, that is configured to collect at least a portion of said first set of communications data from said								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
first user terminal; a second feed horn, that is disposed on said satellite, that is configured to direct a second set of communications data to a second earth-based operational gateway that comprises one of said multiple operational gateways, said second set of microwave signals carrying a second set of communications data from a second user terminal; a second directional coupler, that is disposed on said satellite, that is configured to collect at least a portion of said second set of communications data from the								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
second user terminal; a third feed horn, that is disposed on said satellite, that is configured to direct a selected one of said first set of communications data and said second set of communications data to an earth-based, utility gateway that comprises one of said at least one backup, utility gateways; and at least one switch, disposed on said satellite, that is configured to selectively couple said third feed horn to a selected one of said first directional coupler and said second directional coupler in								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
response to detection of a propagation loss of one of said first set of communications data and said second set of communications data, such that said selected one of said first set of communications data and said second set of communications data is directed by said third feed horn, which carries said selected one of said first set of said communications data and said second set of said communications data, to said earth-based, utility gateway.								
“data transmission system”	No construction necessary	’808 patent at Abstract; 1:17-25; 2:65-3:1;		ViaSat does not believe that the proposed	“a system for providing Internet access and services”	1:7-16 1:40-50		The construction of this term could

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
<u>U.S. Patent No. 6,879,808</u> Claim 1 1. A data transmission system comprising: a two-way communication link comprising at least one satellite; at least one user terminal having two-way communication with the two-way communication link and comprising a cache for selectively caching data broadcast by way of the satellite of the two-way communication link, and further comprising software which retrieves information requested by way of the user terminal and		4:13-20; 4:21-28; 4:35-38; 4:44-47; 4:48-54; 6:17-21; 7:38-42; 11:2-6; 12:2-6; 12:7-12. '808 Prosecution History January 3, 2002 Office Action at 1-9; May 7, 2002 Amendment at 1-8; September 9, 2002 Amendment at 1-6; February 20, 2003 Amendment at 1-6; June 13, 2003 Amendment at 1-23; November 3, 2003 Amendment		constructions of this term are dispositive as to infringement or validity.		2:45-49 2:65-3:1 3:62-64 4:1-9 4:35-47 11:30-42 Figure 1 Figure 3 Figure 4 Figure 5		potentially impact the applicability of certain prior art references that ViaSat has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
information related to the requested information; and at least one gateway having access to data and having two-way communication with the two-way communication link.		at 1-13; March 26, 2004 Amendment at 1-14; July 27, 2004 Amendment at 1-15. U.S. Patent No. 6,038,594 (“‘594 patent”) (cited at ‘808 patent, 2:13-20) at 10:29-64; 11:6-12:16.						
"a cache" <u>U.S. Patent No. 6,879,808</u> Claim 1 1. A data transmission system comprising: a two-way communication link comprising at least one satellite;	“specialized memory, other than DRAM, that requires no active system capacity when data is retrieved”	‘808 patent at Fig. 1, 3-5; 3:44-45; 5:3-10; 6:7-16; 7:57-60; 8:52-65; 10:9-15; 10:40-44; 10:57-65; 11:3-10; 11:56-67. ‘808 Prosecution	U.S. Patent 6,658,463, at 6:22-30. (VST0075525 6) Mogul, “Squeezing More Bits Out of HTTP Caches” (2000), at 6. (VST0075597 2)	ViaSat believes, based upon the proposed constructions, that construction of this term may be dispositive.	“a specialized memory comprising a high-speed storage mechanism, which may be either a reserved section of main memory or an independent high-speed storage	Response to Office Action, October 19, 2003, at 4 Response to Office Action, February 13, 2003, at 5 Response	<i>Merriam-Webster’s Collegiate Encyclopedia</i> , Merriam-Webster, Incorporated, 2000, p. 262, “cache” [SSL0102940 – SSL0102942] Roberto Di Pietro & Luigi V. Mancini, <i>Intrusion Detection Systems</i> , Springer Science+Business Media, LLC, 2008, p.	The construction of this term potentially impacts whether the accused products infringe. The construction of this term could potentially impact the

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
at least one user terminal having two-way communication with the two-way communication link and comprising a cache for selectively caching data broadcast by way of the satellite of the two-way communication link, and further comprising software which retrieves information requested by way of the user terminal and information related to the requested information; and at least one gateway having access to data and having two-way communication with the two-way communication link.		History January 3, 2002 Office Action at 6; May 7, 2002 Amendment at 2-6; August 15, 2002 Office Action at 3, 5-6; September 3, 2002 Amendment at 2-4; November 13, 2002 Office Action at 2-4; February 20, 2003 Amendment at 4-9; May 7, 2003 Office action at 2-3; August 21, 2003 Office Action at 3-6; November 3, 2003 Amendment	J. J. Kistler and M. Satyanarayana n, "Disconnected Operation in the Coda File System" (1992), at 4. (VST0222191 5) L. B. Mummert, "Exploiting Weak Connectivity for Mobile File Access" (1995), at 143. (VST0222193 7) Jiang, "Web Prefetching in a Mobile Environment" (1998), at 25-32. (VST0211274 6-53) Krishnamurthy, "Key		device"	to Office Action, April 27, 2015, at 3	214 [SSL0102927 – SSL0102929] CPM Group, <i>The CPM Dictionary, First Edition</i> , Witter Publishing Co., 2004, p. 37, "cache" [SSL0102917 – SSL0102919] Frank R. Spellman & Melissa L. Stoudt, <i>Nuclear Infrastructure Protection & Homeland Security</i> , Government Institutes, 2011, p. 131 [SSL0102934 – SSL0102936]	applicability of certain prior art references that ViaSat has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
<u>Claim 11</u> 11. The system recited in claim 1 wherein the at least one gateway comprises a cache. <u>Claim 12</u> 12. A method of data communication comprising the steps of: providing one or more orbiting satellites that comprise a two-way communication link; providing at least one user terminal having two-way communication with the two-way communication link and comprising a cache for selectively caching data broadcast by way of the two-way		at 6; April 1, 2004 Office Action at 3-4, 6; March 26, 2004 Office Action at 6; June 6, 2004 Office Action at 3-4, 6; July 27, 2004 Office Action at 4-5, 13.	Differences between HTTP/1.0 and HTTP/1.1” (1999), at 13. (VST02110667) B. Noble and M. Satyanarayana n, “An Empirical Study of a Highly Available File System” (1994), at 1. (VST02221953) G. Barish and K. Obraczka, “World Wide Web Caching: Trends and Techniques” (2000), at 178. (VST02221906)					

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
communication link, and further comprising software which retrieves information requested by way of the user terminal and information related to the requested information; providing at least one gateway having access to data and having two-way communication with the two-way communication link; generating requests for data at the at least one user terminal; transmitting the requests for data from the at least one user terminal by way of the two-way communication link to the at least one gateway; obtaining the								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
requested data at the at least one gateway; and transmitting the requested data from the at least one gateway to the at least one user terminal by way of the two-way communication link.								
"data broadcast" <u>U.S. Patent No. 6,879,808</u> Claim 1 1. A data transmission system comprising: a two-way communication link comprising at least one satellite; at least one user terminal having two-way communication with the two-way communication link and	"data transmitted by a satellite that is intended for delivery to multiple users in a coverage area"	'808 patent at Abstract; 1:11-16; 1:40-46; 1:56-67; 2:13-20; 2:25-31; 2:45-49; 2:61-3:3; 3:15-20; 3:25-34; 3:35-46; 3:47-54; 4:22-28; 4:44-47; 4:48-51; 5:40-49; 6:24-26; 6:45-46; 7:39-44; 7:57-64;	Larry Peterson, Computer Networks: A Systems Approach, Morgan Kaufmann; First edition (1996), at 26. (VST0076233 4) James Kurose, Computer Networking: A Top Down Approach, Addison Wesley Publishing	ViaSat believes, based upon the proposed constructions , that construction of this term may be dispositive.	"data transmitted by a satellite to a coverage area"	Abstract 3:25-33 10:32:45 11:57-67 Response to Office Action, July 20, 2004, at 2-3, 12 Response to Office Action, October 29, 2003, at 2, 15	Bulletin of the Atomic Scientists, <i>Science and Public Affairs</i>, March 1969, p. 40 [SSL0102908 – SSL0102909] Dharma Raj Cheruku, <i>Satellite Communication</i>, I.K. International Publishing House Pvt. Ltd., 2009, p. 297 [SSL0102914 – SSL0102916] Anil K. Maini & Varsha Agrawal, <i>Satellite Technology Principles and Applications</i>, John Wiley & Sons Ltd, 2007, p. 309	The construction of this term potentially impacts whether the accused products infringe. The construction of this term could potentially impact the applicability of certain prior art references that ViaSat has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
comprising a cache for selectively caching data broadcast by way of the satellite of the two-way communication link, and further comprising software which retrieves information requested by way of the user terminal and information related to the requested information; and at least one gateway having access to data and having two-way communication with the two-way communication link. <u>Claim 4</u> 4. The system recited in claim 1 wherein the two-way		7:57-64; 8:11-16; 8:47-49; 9:31-33; 9:64-10:6; 10:27-31; 10:40-45; 11:6-15; 11:57-59; 12:2-6; ‘808 Prosecution History May 5, 2002 Amendment at 4, 5; September 3, 2002 Amendment at 3-5; February 20, 2003 Amendment at 3-4; June 13, 2003 Amendment at 9-14, 19-20; November 3, 2002 Amendment at 6, 9-10; March 26,	Company (2001), at 391-92. (VST0076198 4-85) Demet Aksoy and Michael Franklin, “Scheduling for Large-Scale On-Demand Data Broadcasting” (1998), at 1-2. (VST0211269 8-99) Vincenzo Libertore, “Caching and Scheduling for Broadcast Disk Systems” (1998), at Abstract and 1. (VST0211276 7-68) NASA, Satellite Networks: Architectures, Applications				[SSL0102920 – SSL0102922] Tadashi Shiomi and Mitsutshi Hatori, <i>Wave Summit Course: Digital Broadcasting</i>, Ohmsha, Ltd, 2000, p. 159-160 [SSL0102930 – SSL0102933] Amjad Umar, <i>Mobile Computing and Wireless Communications</i>, NGE Solutions, Inc., 2004, p. 9-28 [SSL0102937 – SSL0102939] Frank R. Spellman & Melissa L. Stoudt, <i>Nuclear Infrastructure Protection & Homeland Security</i>, Government Institutes, 2011, p. 131 [SSL0102934 – SSL0102936]	

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
communication link comprises a low bandwidth request link and a high bandwidth data broadcast link. <u>Claim 12</u> 12. A method of data communication comprising the steps of: providing one or more orbiting satellites that comprise a two-way communication link; providing at least one user terminal having two-way communication with the two-way communication link and comprising a cache for selectively caching data broadcast by way of the two-way		2004 Amendment at 3-4, 6, 10, 13-14; July 27, 2004 Amendment at 3-4, 7, 10, 14. U.S. Patent No. 6,038,594 (“‘594 patent”) (cited at ‘808 patent, 2:13-20) at 3:10-13; 4:12-15; 9:57-60; 10:13-22.	and Technologies (1998), at 22, 30, and 33. (VST0211077 3, VST02110781 , VST02110784) U.S. Patent Application No. 09/267,658 to Humphrey, at [0027]. (VST0075471 9-20) R. Prasad and J. Farserotu, “ATM OVER Ka-BAND SATCOM VIA CDMA” (1998), at 1860. (VST0222196 7) Wong, “Policy-Based Tunable Reliable					

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
communication link, and further comprising software which retrieves information requested by way of the user terminal and information related to the requested information; providing at least one gateway having access to data and having two-way communication with the two-way communication link; generating requests for data at the at least one user terminal; transmitting the requests for data from the at least one user terminal by way of the two-way communication link to the at least one gateway; obtaining the			Multicast for Periodic Information Dissemination ” (1998), at 1. (VST02112816) U.S. Patent No. 6,208,626, at 2:51-54. (VST00755036) U.S. Patent No. 7,327,989, at 1:36-44. (VST02222005) U.S. Patent No. 6,038,594, at 10:13-27. (VST00754891) U.S. Patent No. 6,201,961, at 1:13-26. (VST02221994)					

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
requested data at the at least one gateway; and transmitting the requested data from the at least one gateway to the at least one user terminal by way of the two-way communication link. <u>Claim 18</u> 18. The method recited in claim 12 herein the step of transmitting the requested data comprises transmitting the data by way of a high bandwidth data broadcast link.			U.S. Patent No. 5,610,556, at 3:53-67. (VST0222198 4)					
“information related to the requested information” <u>U.S. Patent No. 6,879,808</u>	No construction necessary	‘808 patent at Fig. 5; Abstract; 1:11-16; 2:53-58; 3:14-24; 3:30-33; 10:20-65;		ViaSat does not believe that the proposed constructions of this term are dispositive as	“qualitatively similar to the specific information requested by a specific user”	10:32:45 11:48-56		The construction of this term could potentially impact the applicability of certain

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
Claim 1 1. A data transmission system comprising: a two-way communication link comprising at least one satellite; at least one user terminal having two-way communication with the two-way communication link and comprising a cache for selectively caching data broadcast by way of the satellite of the two-way communication link, and further comprising software which retrieves information requested by way of the user terminal and information related to the requested		11:30-36; 11:42-67; 12:1-12. '808 Prosecution History January 3, 2003 Office Action at 5, 7; August 15, 2002 Office Action at 4; September 3, 2002 Amendment at 1-3; November 13, 2002 Office Action at 2-3, 4, 7; February 20, 2003 Amendment at 1-3, 8-9; May 7, 2003 Office Action at 2-3, 4, 7; June 13, 2003 Amendment at 13-14, 19-20;		to infringement or validity.				prior art references that ViaSat has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
information; and at least one gateway having access to data and having two-way communication with the two-way communication link. <u>Claim 12</u> 12. A method of data communication comprising the steps of: providing one or more orbiting satellites that comprise a two-way communication link; providing at least one user terminal having two-way communication with the two-way communication link and comprising a cache for selectively caching data broadcast by way		August 21, 2003 Office Action at 2-6; November 3, 2003 Amendment at 4, 8-9; January 21, 2004 Office Action at 2, 5; March 26, 2004 Amendment at 3-4, 12; June 9, 2004 Office Action at 2, 5, 10; July 27, 2004 Amendment at 3, 5, 10-13.						

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
of the two-way communication link, and further comprising software which retrieves information requested by way of the user terminal and information related to the requested information; providing at least one gateway having access to data and having two-way communication with the two-way communication link; generating requests for data at the at least one user terminal; transmitting the requests for data from the at least one user terminal by way of the two-way communication link to the at least one gateway;								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
obtaining the requested data at the at least one gateway; and transmitting the requested data from the at least one gateway to the at least one user terminal by way of the two-way communication link.								
“implementing signaling based on a non-asynchronous transfer mode (ATM) protocol” <u>U.S. Patent No. 6,400,696</u> <u>Claim 1</u> 1. A dynamic resource management system comprising: a local area network edge device; one or	No construction necessary	'696 patent abstract; 1:39-49; 1:62-2:4; 2:36-43; 3:34-43.	Kota, Sastri L., et al., <i>Broadband Satellite Communications for Internet Access</i> , Kluwer Academic Publishers, 2004 at 27. VST00758831 .	ViaSat does not believe that the proposed constructions of this term are dispositive as to infringement or validity.	“using a multiple access control signaling standard on the link layer that does not use the principles of ATM”	Abstract 2:36-43 3:34-43 Remarks Made in an Amendment, December 21, 2001, at 3, 4	Daniel Minoli, <i>Telecommunications Technology Handbook</i> (1991), at p. 220-224. [SSL0102805 – SSL0102812] Sumit Kasera, <i>ATM Networks: Concepts and Protocols</i> (2d ed. 2006), at pp. 28-43, 219-221. [SSL0102837 – SSL102878] Kota, Sastri et al., <i>Broadband Satellite Communications for Internet Access</i> (2004), at p. 314-316.	The construction of this term could potentially impact the applicability of certain prior art references that ViaSat has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
more personal computers coupled to the local area network edge device by way of a network; a gateway; a data source coupled to the gateway; and a satellite that provides a communications link between the local area network edge device and the gateway; the local area network edge device and the gateway implementing signaling based on a non-asynchronous transfer mode (ATM) protocol , and wherein the non-asynchronous transfer mode protocol is overlaid with one or more dynamic assignment/multiple access							[SSL0102827 – SSL0102836] Gurdeep S. Hura & Mukesh Singhal, <i>Data and Computer Communications: Networking and Interworking</i> (2001), at p. 445. [SSL0102821 – SSL102826] <i>Wave Summit Course: Satellite Communications</i> (Iida, Takashi ed. 2000), at pp. 373-375. [SSL0102795 – SSL102804] <i>Resource Management in Satellite Networks: Optimization and Cross-Layer Design</i>, (Giovanni Giambene ed. 2007), at pp. 15-19. [SSL0102879 – SSL102892] <i>Reference Manual for Telecommunications Engineering</i>, Vol. 2 (Roger L. Freeman ed., 3rd ed. 2002), at pp. 2611-2612.	

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
communication protocols.							[SSL0102757 – SSL102764] <i>Microsoft Encyclopedia of Networking</i>, (2d ed. 2002), at pp. 111-116. [SSL0102779 – SSL102794] Frank Hargrave, <i>Hargrave's Communications Dictionary</i>, IEEE Press (2001), at 32-33. [SSL0102765 – SSL102772]	
“the non-asynchronous transfer protocol mode is overlaid with one or more dynamic assignment/multiple access communication protocols” <u>U.S. Patent No. 6,400,696</u> <u>Claim 1</u> 1. A dynamic	No construction necessary	'696 patent, Figure 2; 1:10-14; 1:14-22; 1:22-26; 1:39-49; 2:43-46; 3:28-34; 3:64-4:8; 4:9-15.		ViaSat does not believe that the proposed constructions of this term are dispositive as to infringement or validity.	“one or more dynamic assignment/multiple access algorithms implement communications protocols that are built on top of the nonasynchronous transfer mode protocol”	2:43-46 3:49-53 3:56-4:15 4:31-36 Remarks Made in an Amendment, December 21, 2001, at 3, 4	Margarita Pagani, ed., <i>Encyclopedia of Multimedia Technology and Networking</i> (2005), at p. 365. [SSL0158681 – SSL0158683] Jie Wu, ed., <i>Handbook on Theoretical and Algorithmic Aspects of Sensor, Ad Hoc Wireless, and Peer-to-Peer Networks</i> (2006), at p. 851. [SSL0158684 – SSL0158686]	The construction of this term could potentially impact the applicability of certain prior art references that ViaSat has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
resource management system comprising: a local area network edge device; one or more personal computers coupled to the local area network edge device by way of a network; a gateway; a data source coupled to the gateway; and a satellite that provides a communications link between the local area network edge device and the gateway; the local area network edge device and the gateway implementing signaling based on a non-asynchronous transfer mode (ATM) protocol, and wherein the								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
non-asynchronous transfer mode protocol is overlaid with one or more dynamic assignment/multiple access communication protocols.								
“a classifier for identifying specific types of said messages” U.S. Patent No. 7,219,132 <u>Claim 1</u> 1. A dynamic resource allocation system comprising: one or more personal computers coupled to a local area network edge device that generates a resource request in response to received data	No construction necessary or alternatively, “an entity which identifies specific types of said messages according to defined rules”	’132 patent abstract; 1:24-46; 2:1-6; 2:19-20; 4:5-34. ’132 patent file history: February 3, 2006 Applicant Remarks in Response to Non-Final Rejection; Applicant’s Remarks accompanying August 2, 2006 Supplemental Response or	<u>IBM Dictionary of Computing</u>, Compiled and Edited by George McDaniel, Tenth Edition, August 1993, VST02308944 · BICSI, <i>LAN Design Manual</i>, Chapter 11 – ATM Networking, 1996, VST02308945 -9010, at VST02308965 &	ViaSat does not believe that the proposed constructions of this term are dispositive as to infringement or validity.	classifier: “an entity which selects packets based on the content of packet headers according to defined rules” SS/L does not believe that the rest of the phrase, “for identifying specific types of said messages,” needs construction	Abstract 2:1-6 2:14-23 4:24-57 Figure 2 Notice of Allowance, February 13, 2007, at 2 Remarks Made in Amendment of May 15, 2006, at 7, 8	IETF “Architecture for Differentiated Services” RFC 2475. [SSL0158639 – SSL0158663] IETF “Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers” RFC 2474. [SSL0158625 – SSL0158638]	The construction of this term could potentially impact the applicability of certain prior art references that ViaSat has asserted.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
from a user of said personal computer; a satellite that provides a communication link; one or more Internet protocol networks; a gateway in connection with said local area network edge device via said communication link and interfaces to one or more said Internet protocol networks, wherein said gateway receives said resource request from said local area network edge device to set required resources; a generator for generating messages of different types from said user data; a classifier		Amendment ; November 16, 2006 Amendment in Response to Non-final Rejection; Examiner's Remarks accompanying Notice of Allowability	VST02308985 .			Remarks Made in an Amendment of January 31, 2006, at 5 Appellant's Brief on Appeal, September 14, 2005, at 3, 6 Remarks Made in an Amendment, August 17, 2004, at 5, 7-8, 10, 22 IETF "Architecture for Differentiated Services" RFC 2475. [SSL0158639 – SSL0158663]		

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
for identifying specific types of said messages; a marker for marking said identifying messages; and a scheduler for scheduling said marked messages; wherein said gateway dynamically allocates resources to meet the requirements of each said marked messages by applying a dynamic assignment/multiple access (DAMA) communication protocol for transmitting data between said one or more personal computers and said one or more Internet protocol networks; wherein said DAMA communication						IETF “Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers” RFC 2474. [SSL0158625 – SSL0158638]		

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
protocol comprises three modes, including fixed assignment, reservation assignment, and random assignment modes.								
“marker for marking said identif[ied] messages” U.S. Patent No. 7,219,132 <u>Claim 1</u> 1. A dynamic resource allocation system comprising: one or more personal computers coupled to a local area network edge device that generates a resource request in response to received data from a user of said personal	No construction necessary or alternatively, “an entity that performs the process of marking said messages identified by the classifier based on defined rules”	’132 patent 1:24-46; 2:19-20; 4:5-34. ’132 patent file history: February 3, 2006 Applicant Remarks in Response to Non-Final Rejection; Applicant’s Remarks accompanying August 2, 2006 Supplemental Response or Amendment; November 16, 2006	<u>IBM Dictionary of Computing</u>, Compiled and Edited by George McDaniel, Tenth Edition, August 1993, VST02308944 . <u>BICSI, LAN Design Manual</u>, Chapter 11 – ATM Networking, 1996, VST02308945 -9010, at VST02308965 & VST02308985 .	ViaSat does not believe that the proposed constructions of this term are dispositive as to infringement or validity.	“an entity that performs the process of setting header fields of messages selected by the classifier based on defined rules”	2:14-23 4:24-57 Notice of Allowance, February 13, 2007, at 2 Appellant’s Brief on Appeal, September 14, 2005, at 3 IETF “Architecture for Differentiated Services” RFC 2475.	IETF “Architecture for Differentiated Services” RFC 2475. [SSL0158639 – SSL0158663] IETF “Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers” RFC 2474. [SSL0158625 – SSL0158638]	SS/L does not believe that the construction of this term will have a significant impact on the merits of the case, except to the extent that an improper construction could lead to juror confusion.

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
computer; a satellite that provides a communication link; one or more Internet protocol networks; a gateway in connection with said local area network edge device via said communication link and interfaces to one or more said Internet protocol networks, wherein said gateway receives said resource request from said local area network edge device to set required resources; a generator for generating messages of different types from said user data; a classifier for identifying specific types of		Amendment in Response to Non-final Rejection; Examiner's Remarks accompanying Notice of Allowability				[SSL0158639 – SSL0158663] IETF "Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers" RFC 2474. [SSL0158625 – SSL0158638]		

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
said messages; a marker for marking said identifying messages ; and a scheduler for scheduling said marked messages; wherein said gateway dynamically allocates resources to meet the requirements of each said marked messages by applying a dynamic assignment/multi ple access (DAMA) communication protocol for transmitting data between said one or more personal computers and said one or more Internet protocol networks; wherein said DAMA communication protocol comprises three								

Joint Claim Construction Chart

Claim Language	Plaintiffs' Proposed Construction	Plaintiffs' Supporting Intrinsic Evidence	Plaintiff's Supporting Extrinsic Evidence	Plaintiffs' Statement of Impact of Proposed Construction	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence	Defendants' Statement of Impact of Proposed Construction
modes, including fixed assignment, reservation assignment, and random assignment modes.								

Exhibit B

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
"frequency band" U.S. Patent No. 8,107,875 <u>Claim 1</u> 1. A spot beam satellite comprising: an antenna system configured to create a beam pattern having a plurality of different colors, wherein a color has a unique combination of frequency band and polarization, the spot beam satellite being configured to receive data from a plurality of service beams and from at least one feeder beam, each service beam having an associated service beam coverage area and the at least one feeder beam having an associated feeder beam coverage area, wherein the feeder beam coverage area is proximate to one or more of the service beam coverage areas, wherein the at least one feeder beam and a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area are allocated	"A continuous range of electromagnetic spectrum"			

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
different colors from the beam pattern, such that signals associated with different colors differ by a frequency band , a polarization, or both a frequency band and a polarization, wherein the feeder beam coverage area is not proximate to one or more of the service beam coverage areas, and wherein a set of colors allocated to a service beam associated with each of the one or more service beam coverage areas not proximate to the feeder beam coverage area includes at least one same color allocated to the at least one feeder beam, such that signals associated with the same color have the same frequency band and polarization.				
"spot beam" <u>U.S. Patent No. 8,107,875</u> <u>Claim 1</u> 1. A spot beam satellite comprising: an antenna system configured to create a beam		"A satellite transmission that is focused on a compact geographical area"	"a focusing of electromagnetic radiation to permit communication with devices in a particular region"	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
pattern having a plurality of different colors, wherein a color has a unique combination of frequency band and polarization, the spot beam satellite being configured to receive data from a plurality of service beams and from at least one feeder beam, each service beam having an associated service beam coverage area and the at least one feeder beam having an associated feeder beam coverage area, wherein the feeder beam coverage area is proximate to one or more of the service beam coverage areas, wherein the at least one feeder beam and a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area are allocated different colors from the beam pattern, such that signals associated with different colors differ by a frequency band, a polarization, or both a frequency band and a polarization, wherein the feeder beam coverage area is not proximate to one or more of				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
the service beam coverage areas, and wherein a set of colors allocated to a service beam associated with each of the one or more service beam coverage areas not proximate to the feeder beam coverage area includes at least one same color allocated to the at least one feeder beam, such that signals associated with the same color have the same frequency band and polarization. <u>Claim 2</u> 2. The spot beam satellite of claim 1 wherein the spot beam satellite includes a directional antenna for receiving the plurality of service beams and the at least one feeder beam, and wherein the satellite is configured to identify signals received from the service beams and the at least one feeder beam using the direction from which the beams originate and the color of the beam. <u>Claim 4</u> 4. The spot beam satellite of claim 1 wherein if a first service				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
beam coverage area associated with a first service beam is proximate to a second service beam coverage area associated with a second service beam, the first service beam is allocated a first set of colors from the beam pattern and the second service beam is allocated a second set of colors from the beam pattern, wherein the first set and second set are disjoint sets. <u>Claim 5</u> 5. The spot beam satellite of claim 1 wherein if a first service beam coverage area associated with a first service beam is not proximate to a second service beam coverage area associated with a second service beam, both the first service beam and the second service beam are allocated a same set of colors from the beam pattern. <u>Claim 6</u> 6. The spot beam satellite of claim 1 wherein the service beams comprise an uplink component				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
and a downlink component, and the uplink and downlink components are assigned different frequencies. <u>Claim 7</u> 7. The spot beam satellite of claim 6 wherein the satellite is configured to convert a received signal from the uplink component from a first frequency associated with the uplink to a second frequency associated with the downlink. <u>Claim 8</u> 8. The spot beam satellite of claim 1 wherein the at least one feeder beam further comprises an uplink feeder beam having at least one common frequency channel and a downlink feeder beam having at least one common frequency channel, wherein the at least one common frequency channel associated with the uplink feeder beam employs a first frequency range and the at least one common frequency channel associated with the downlink				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
feeder beam employs a second frequency range, and wherein the first frequency range is different than the second frequency range. <u>Claim 9</u> 9. The spot beam satellite of claim 8 wherein the satellite is configured to convert a received signal from the uplink component from a first frequency associated with the uplink to a second frequency associated with the downlink. <u>Claim 12</u> 12. The spot beam satellite of claim 1 wherein the satellite is configured to receive data from a second at least one feeder beam, the second at least one feeder beam being associated with a second feeder beam coverage area, wherein the second feeder beam coverage area is not proximate to any of the service beam coverage areas, and wherein the second at least one feeder beam is allocated all of the colors of the beam pattern.				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
<u>Claim 27</u> 27. The spot beam satellite of claim 1 wherein a set of colors allocated to the at least one feeder beam includes all colors from the beam pattern not allocated to a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area.				
<u>Claim 29</u> 29. The spot beam satellite of claim 1 wherein the at least one feeder beam comprises two or more feeder beams that have at least partially overlapping feeder beam coverage areas.				
"service beam" <u>U.S. Patent No. 8,107,875</u> <u>Claim 1</u> 1. A spot beam satellite comprising: an antenna system configured to create a beam		"A transmission of information between the satellite and one or more subscriber terminals in one of the plurality of service	"a focusing of electromagnetic radiation to permit communication of information between the satellite and one or more user or customer terminals"	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
pattern having a plurality of different colors, wherein a color has a unique combination of frequency band and polarization, the spot beam satellite being configured to receive data from a plurality of service beams and from at least one feeder beam, each service beam having an associated service beam coverage area and the at least one feeder beam having an associated feeder beam coverage area, wherein the feeder beam coverage area is proximate to one or more of the service beam coverage areas, wherein the at least one feeder beam and a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area are allocated different colors from the beam pattern, such that signals associated with different colors differ by a frequency band, a polarization, or both a frequency band and a polarization, wherein the feeder beam coverage area is not proximate to one or more of		beam coverage areas”		

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
the service beam coverage areas, and wherein a set of colors allocated to a service beam associated with each of the one or more service beam coverage areas not proximate to the feeder beam coverage area includes at least one same color allocated to the at least one feeder beam, such that signals associated with the same color have the same frequency band and polarization. <u>Claim 2</u> 2. The spot beam satellite of claim 1 wherein the spot beam satellite includes a directional antenna for receiving the plurality of service beams and the at least one feeder beam, and wherein the satellite is configured to identify signals received from the service beams and the at least one feeder beam using the direction from which the beams originate and the color of the beam. <u>Claim 4</u> 4. The spot beam satellite of claim 1 wherein if a first service beam				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
coverage area associated with a first service beam is proximate to a second service beam coverage area associated with a second service beam, the first service beam is allocated a first set of colors from the beam pattern and the second service beam is allocated a second set of colors from the beam pattern, wherein the first set and second set are disjoint sets. <u>Claim 5</u> 5. The spot beam satellite of claim 1 wherein if a first service beam coverage area associated with a first service beam is not proximate to a second service beam coverage area associated with a second service beam, both the first service beam and the second service beam are allocated a same set of colors from the beam pattern. <u>Claim 6</u> 6. The spot beam satellite of claim 1 wherein the service beams comprise an uplink component				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
and a downlink component, and the uplink and downlink components are assigned different frequencies. <u>Claim 12</u> 12. The spot beam satellite of claim 1 wherein the satellite is configured to receive data from a second at least one feeder beam, the second at least one feeder beam being associated with a second feeder beam coverage area, wherein the second feeder beam coverage area is not proximate to any of the service beam coverage areas, and wherein the second at least one feeder beam is allocated all of the colors of the beam pattern. <u>Claim 27</u> 27. The spot beam satellite of claim 1 wherein a set of colors allocated to the at least one feeder beam includes all colors from the beam pattern not allocated to a service beam associated with each of the one or more service beam coverage areas proximate				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
to the feeder beam coverage				
"feeder beam" <u>U.S. Patent No. 8,107,875</u> <u>Claim 1</u> 1. A spot beam satellite comprising: an antenna system configured to create a beam pattern having a plurality of different colors, wherein a color has a unique combination of frequency band and polarization, the spot beam satellite being configured to receive data from a plurality of service beams and from at least one feeder beam, each service beam having an associated service beam coverage area and the at least one feeder beam having an associated feeder beam coverage area, wherein the feeder beam coverage area is proximate to one or more of the service beam coverage areas, wherein the at least one feeder beam and a service beam associated with each of the one or		"A transmission between the satellite and a gateway containing information that is received from or relayed to subscriber terminals in the plurality of service beam coverage areas"	"a focusing of electromagnetic radiation to permit communication between a satellite and one or more network interfacing terminals"	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
more service beam coverage areas proximate to the feeder beam coverage area are allocated different colors from the beam pattern, such that signals associated with different colors differ by a frequency band, a polarization, or both a frequency band and a polarization, wherein the feeder beam coverage area is not proximate to one or more of the service beam coverage areas, and wherein a set of colors allocated to a service beam associated with each of the one or more service beam coverage areas not proximate to the feeder beam coverage area includes at least one same color allocated to the at least one feeder beam, such that signals associated with the same color have the same frequency band and polarization. <u>Claim 2</u> 2. The spot beam satellite of claim 1 wherein the spot beam satellite includes a directional antenna for receiving the plurality of service beams and the at least one feeder				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
beam, and wherein the satellite is configured to identify signals received from the service beams and the at least one feeder beam using the direction from which the beams originate and the color of the beam. <u>Claim 8</u> 8. The spot beam satellite of claim 1 wherein the at least one feeder beam further comprises an uplink feeder beam having at least one common frequency channel and a downlink feeder beam having at least one common frequency channel, wherein the at least one common frequency channel associated with the uplink feeder beam employs a first frequency range and the at least one common frequency channel associated with the downlink feeder beam employs a second frequency range, and wherein the first frequency range is different than the second frequency range. <u>Claim 12</u> 12. The spot beam satellite of				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
claim 1 wherein the satellite is configured to receive data from a second at least one feeder beam, the second at least one feeder beam being associated with a second feeder beam coverage area, wherein the second feeder beam coverage area is not proximate to any of the service beam coverage areas, and wherein the second at least one feeder beam is allocated all of the colors of the beam pattern. <u>Claim 27</u> 27. The spot beam satellite of claim 1 wherein a set of colors allocated to the at least one feeder beam includes all colors from the beam pattern not allocated to a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area. <u>Claim 29</u> 29. The spot beam satellite of claim 1 wherein the at least one feeder beam comprises two or more feeder beams that have at				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
least partially overlapping feeder beam coverage areas.				
"feeder beam coverage area" U.S. Patent No. 8,107,875 <u>Claim 1</u> 1. A spot beam satellite comprising: an antenna system configured to create a beam pattern having a plurality of different colors, wherein a color has a unique combination of frequency band and polarization, the spot beam satellite being configured to receive data from a plurality of service beams and from at least one feeder beam, each service beam having an associated service beam coverage area and the at least one feeder beam having an associated feeder beam coverage area, wherein the feeder beam coverage area is proximate to one or more of the service beam coverage areas, wherein the at least one feeder beam and a service beam		"A portion of the total coverage area allocated for the gateway associated with the feeder beam"	"the portion of the earth's surface associated with a feeder beam"	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area are allocated different colors from the beam pattern, such that signals associated with different colors differ by a frequency band, a polarization, or both a frequency band and a polarization, wherein the feeder beam coverage area is not proximate to one or more of the service beam coverage areas, and wherein a set of colors allocated to a service beam associated with each of the one or more service beam coverage areas not proximate to the feeder beam coverage area includes at least one same color allocated to the at least one feeder beam, such that signals associated with the same color have the same frequency band and polarization. <u>Claim 12</u> 12. The spot beam satellite of claim 1 wherein the satellite is configured to receive data from a second at least one feeder beam,				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
the second at least one feeder beam being associated with a second feeder beam coverage area, wherein the second feeder beam coverage area is not proximate to any of the service beam coverage areas, and wherein the second at least one feeder beam is allocated all of the colors of the beam pattern. <u>Claim 27</u> 27. The spot beam satellite of claim 1 wherein a set of colors allocated to the at least one feeder beam includes all colors from the beam pattern not allocated to a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area. <u>Claim 29</u> 29. The spot beam satellite of claim 1 wherein the at least one feeder beam comprises two or more feeder beams that have at least partially overlapping feeder beam coverage areas.				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
“proximate” <u>U.S. Patent No. 8,107,875</u> Claim 1 1. A spot beam satellite comprising: an antenna system configured to create a beam pattern having a plurality of different colors, wherein a color has a unique combination of frequency band and polarization, the spot beam satellite being configured to receive data from a plurality of service beams and from at least one feeder beam, each service beam having an associated service beam coverage area and the at least one feeder beam having an associated feeder beam coverage area, wherein the feeder beam coverage area is proximate to one or more of the service beam coverage areas, wherein the at least one feeder beam and a service beam associated with each of the one or more service beam coverage areas		“Separated by a distance such that allocated coverage areas are at least partially overlapping”	“insufficiently separated to permit color re-use”	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
proximate to the feeder beam coverage area are allocated different colors from the beam pattern, such that signals associated with different colors differ by a frequency band, a polarization, or both a frequency band and a polarization, wherein the feeder beam coverage area is not proximate to one or more of the service beam coverage areas, and wherein a set of colors allocated to a service beam associated with each of the one or more service beam coverage areas not proximate to the feeder beam coverage area includes at least one same color allocated to the at least one feeder beam, such that signals associated with the same color have the same frequency band and polarization. <u>Claim 4</u> 4. The spot beam satellite of claim 1 wherein if a first service beam coverage area associated with a first service beam is proximate to a second service beam coverage area associated with a second				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
service beam, the first service beam is allocated a first set of colors from the beam pattern and the second service beam is allocated a second set of colors from the beam pattern, wherein the first set and second set are disjoint sets. <u>Claim 5</u> 5. The spot beam satellite of claim 1 wherein if a first service beam coverage area associated with a first service beam is not proximate to a second service beam coverage area associated with a second service beam, both the first service beam and the second service beam are allocated a same set of colors from the beam pattern. <u>Claim 12</u> 12. The spot beam satellite of claim 1 wherein the satellite is configured to receive data from a second at least one feeder beam, the second at least one feeder beam being associated with a second feeder beam coverage				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
area, wherein the second feeder beam coverage area is not proximate to any of the service beam coverage areas, and wherein the second at least one feeder beam is allocated all of the colors of the beam pattern. <u>Claim 27</u> 27. The spot beam satellite of claim 1 wherein a set of colors allocated to the at least one feeder beam includes all colors from the beam pattern not allocated to a service beam associated with each of the one or more service beam coverage areas proximate to the feeder beam coverage area.				
“having at least one common frequency channel” <u>U.S. Patent No. 8,107,875</u> <u>Claim 8</u> 8. The spot beam satellite of claim 1 wherein the at least one feeder beam further comprises an uplink feeder beam having at least one		“Utilizing at least one same frequency band and polarization as that allocated to one of the service beams.”	“utilizing at least one same frequency band as that allocated to a different beam”	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
common frequency channel and a downlink feeder beam having at least one common frequency channel , wherein the at least one common frequency channel associated with the uplink feeder beam employs a first frequency range and the at least one common frequency channel associated with the downlink feeder beam employs a second frequency range, and wherein the first frequency range is different than the second frequency range.				
“regular frequency re-use pattern” <u>U.S. Patent No. 8,010,043</u> <u>Claim 6</u> 6. The satellite for illuminating a geographic area with signals of claim 1, wherein the beam pattern has a regular frequency re-use pattern.		No construction necessary or alternatively "a structured frequency re-use pattern"	“requiring the beams for each color to be uniformly distributed with a constant beam spacing”	
"GSO frequency band" <u>U.S. Patent No. 8,068,827</u>	“A range of frequencies designated for			

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
<u>Claim 7</u> 7. A geostationary orbit (GSO), satellite comprising: a receiver configured to receive from one or more ground stations signals in a GSO frequency band and in an extended frequency spectrum, the extended frequency spectrum including the GSO frequency band and a non-geostationary orbit (NGSO) frequency band; circuitry configured to establish an activated frequency mode to activate one of a GSO frequency band mode and an extended frequency spectrum mode based on information indicating a presence or an absence of an interference situation with an NGSO satellite system; and a transmitter configured to transmit in one of the GSO frequency band and in the NGSO frequency spectrum based on the activated frequency spectrum mode. <u>Claim 8</u> 8. The satellite of claim 7 further comprising: a low-noise amplifier	primary use by legal authorities for use by geostationary satellites”			

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
operative to amplify the transmitted signals and output an amplified signal; a frequency mixer having a first input adapted to receive the amplified signal, a second input coupled to a local oscillator, and an output having a plurality of frequency products including a downlink extended frequency spectrum, the downlink extended frequency spectrum comprising a downlink GSO frequency band and a downlink NGSO frequency band; a splitter having an input coupled to the mixer output, a first splitter output and a second splitter output; a switch having a first input, a second input, and an output; a first bandpass filter having a first bandpass input coupled to the first splitter output and a first bandpass output coupled to the first input of the switch; a second bandpass filter having a second bandpass input coupled to the second splitter output and a second output coupled to the second input of the switch; the first bandpass filter being configured to pass the GSO				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
frequency band ; the second bandpass filter being configured to pass the extended frequency spectrum; and the output of the switch being selectively coupled to either the first switch input or the second switch input.				
NGSO frequency band" <u>U.S. Patent No. 8,068,827</u> <u>Claim 8</u> 8. The satellite of claim 7 further comprising: a low-noise amplifier operative to amplify the transmitted signals and output an amplified signal; a frequency mixer having a first input adapted to receive the amplified signal, a second input coupled to a local oscillator, and an output having a plurality of frequency products including a downlink extended frequency spectrum, the downlink extended frequency spectrum comprising a downlink GSO frequency band and a downlink NGSO frequency band; a splitter having an input coupled to the	"A range of frequencies designated for primary use by legal authorities for use by non-geostationary satellites"			

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
mixer output, a first splitter output and a second splitter output; a switch having a first input, a second input, and an output; a first bandpass filter having a first bandpass input coupled to the first splitter output and a first bandpass output coupled to the first input of the switch; a second bandpass filter having a second bandpass input coupled to the second splitter output and a second output coupled to the second input of the switch; the first bandpass filter being configured to pass the GSO frequency band; the second bandpass filter being configured to pass the extended frequency spectrum; and the output of the switch being selectively coupled to either the first switch input or the second switch input.				
"interference situation" <u>U.S. Patent No. 8,068,827</u> <u>Claim 7</u> 7. A geostationary orbit (GSO), satellite comprising: a receiver	"a situation when there is a disturbance of a radio signal caused by interaction with one or more radio signals operating at			

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
configured to receive from one or more ground stations signals in a GSO frequency band and in an extended frequency spectrum, the extended frequency spectrum including the GSO frequency band and a non-geostationary orbit (NGSO) frequency band; circuitry configured to establish an activated frequency mode to activate one of a GSO frequency band mode and an extended frequency spectrum mode based on information indicating a presence or an absence of an interference situation with an NGSO satellite system; and a transmitter configured to transmit in one of the GSO frequency band and in the NGSO frequency spectrum based on the activated frequency spectrum mode. <u>Claim 9</u> 9. The satellite of claim 7 further comprising: a control device configured to decode instructions from a command module to couple the output of the switch to the first input or the second input	the same or nearly the same frequency”			

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
according to the decoded instructions, the control module providing the information indicating presence or absence of an interference situation with an NGSO satellite system.				
“NGSO frequency spectrum” <u>U.S. Patent No. 8,068,827</u> Claim 7 7. A geostationary orbit (GSO), satellite comprising: a receiver configured to receive from one or more ground stations signals in a GSO frequency band and in an extended frequency spectrum, the extended frequency spectrum including the GSO frequency band and a non-geostationary orbit (NGSO) frequency band; circuitry configured to establish an activated frequency mode to activate one of a GSO frequency band mode and an extended frequency spectrum mode based on information indicating a presence or an absence of an interference situation with an		“frequency band(s) allocated to NGSO satellite communication systems”	“a range of frequencies designated by legal authorities for primary use by non-geostationary satellites”	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
NGSO satellite system; and a transmitter configured to transmit in one of the GSO frequency band and in the NGSO frequency spectrum based on the activated frequency spectrum mode				
“circuitry configured to establish an activated frequency mode . . . based on information indicating the presence or an absence of an interference situation with an NGSO satellite system” <u>U.S. Patent No. 8,068,827</u> Claim 7 7. A geostationary orbit (GSO), satellite comprising: a receiver configured to receive from one or more ground stations signals in a GSO frequency band and in an extended frequency spectrum, the extended frequency spectrum including the GSO frequency band and a non-geostationary orbit (NGSO) frequency band; circuitry configured to establish an activated frequency mode to activate one of a GSO frequency		No construction necessary or alternatively “circuitry configured to select one or more appropriate frequency band(s) during the presence or absence of an interference situation with an NGSO satellite system”	“A control device that uses orbital information to select one or more appropriate frequency band(s) during the presence or absence of an interference situation” Alternatively, the claim term “information indicating a presence or an absence of an interference situation” is indefinite.	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
band mode and an extended frequency spectrum mode based on information indicating a presence or an absence of an interference situation with an NGSO satellite system; and a transmitter configured to transmit in one of the GSO frequency band and in the NGSO frequency spectrum based on the activated frequency spectrum mode.				
"selector" <u>U.S. Patent No. 7,773,942</u> <u>Claim 1</u> 1. A satellite communications system that provides a redundant communication path for communications data that is transmitted between a satellite and a plurality of ground stations by providing at least one backup, earth-based, utility gateway for backing up multiple earth-based operational gateways comprising: a first microwave radiator configured to direct a first set of microwave signals to a first earth-based operational gateway	"circuitry that allows selection between two or more possible electrical paths or signals"			

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
that comprises one of said multiple earth-based operational gateways, said first set of microwave signals carrying a first subset of said communications data from a first user terminal located in spot beam coverage region; a first signal splitter configured to collect at least a portion of said first subset of said communications data from said first user terminal; a second microwave radiator configured to direct a second set of microwave signals to a second earth-based operational gateway that comprises one of said multiple earth-based operational gateways, said second set of microwave signals carrying a second subset of said communications data from a second user terminal; a second splitter configured to collect at least a portion of said second subset of said communications data from said second user terminal; a third microwave radiator configured to direct a selected one of said first set of microwave signals and said				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
second set of microwave signals to said at least one backup, earth-based, utility gateway; and at least one selector on said satellite configured to selectively couple said third microwave radiator to a selected one of said first splitter and said second splitter in response to detection of propagation loss of one of said first set of microwave signals and said second set of microwave signals, such that said selected one of said first set of microwave signals and said second set of microwave signals is directed by said third microwave radiator to carry communications data collected from said selected one of the said first splitter and said second splitter to said at least one backup, earth-based, utility gateway. <u>Claim 3</u> 3. The system of claim 2 further comprising: a third receiver configured to receive microwave signals from said backup utility, earth-based gateway; and a				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
second selector configured to selectively couple said third receiver to a selected one of said first combiner and said second combiner. <u>Claim 6</u> 6. The system of claim 1 wherein said first selector comprises a switch.				
“operational gateway” <u>U.S. Patent No. 7,773,942</u> <u>Claim 1</u> 1. A satellite communications system that provides a redundant communication path for communications data that is transmitted between a satellite and a plurality of ground stations by providing at least one backup, earth-based, utility gateway for backing up multiple earth-based operational gateways comprising: a first microwave radiator configured to direct a first set of microwave signals to a first earth-based operational gateway		“a gateway terminal designed and used as the default gateway terminal in a specified region of a satellite communications system”	“a network interfacing terminal designated and being used to provide communication capacity to a satellite system”	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
that comprises one of said multiple earth-based operational gateways , said first set of microwave signals carrying a first subset of said communications data from a first user terminal located in spot beam coverage region; a first signal splitter configured to collect at least a portion of said first subset of said communications data from said first user terminal; a second microwave radiator configured to direct a second set of microwave signals to a second earth-based operational gateway that comprises one of said multiple earth-based operational gateways , said second set of microwave signals carrying a second subset of said communications data from a second user terminal; a second splitter configured to collect at least a portion of said second subset of said communications data from said second user terminal; a third microwave radiator configured to direct a selected one of said first set of				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
microwave signals and said second set of microwave signals to said at least one backup, earth-based, utility gateway; and at least one selector on said satellite configured to selectively couple said third microwave radiator to a selected one of said first splitter and said second splitter in response to detection of propagation loss of one of said first set of microwave signals and said second set of microwave signals, such that said selected one of said first set of microwave signals and said second set of microwave signals is directed by said third microwave radiator to carry communications data collected from said selected one of the said first splitter and said second splitter to said at least one backup, earth-based, utility gateway. Claim 7 7. A satellite communications system having at least one backup utility gateway for backing up multiple operational gateways				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
comprising: a first feed horn disposed on a satellite that is configured to direct a first set of microwave signals to a first operational earth-based gateway, that comprises one of said multiple operational gateways, said first set of microwave signals carrying a first set of communications data from a first user terminal located in a spot beam coverage region; a first directional coupler, that is disposed on said satellite, that is configured to collect at least a portion of said first set of communications data from said first user terminal; a second feed horn, that is disposed on said satellite, that is configured to direct a second set of communications data to a second earth-based operational gateway that comprises one of said multiple operational gateways, said second set of microwave signals carrying a second set of communications data from a second user terminal; a second directional coupler, that is				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
disposed on said satellite, that is configured to collect at least a portion of said second set of communications data from the second user terminal; a third feed horn, that is disposed on said satellite, that is configured to direct a selected one of said first set of communications data and said second set of communications data to an earth-based, utility gateway that comprises one of said at least one backup, utility gateways; and at least one switch, disposed on said satellite, that is configured to selectively couple said third feed horn to a selected one of said first directional coupler and said second directional coupler in response to detection of a propagation loss of one of said first set of communications data and said second set of communications data, such that said selected one of said first set of communications data and said second set of communications data is directed by said third feed horn, which carries said selected				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
one of said first set of said communications data and said second set of said communications data, to said earth-based, utility gateway.				
“redundant communications path” <u>U.S. Patent No. 7,773,942</u> <u>Claim 1</u> 1. A satellite communications system that provides a redundant communication path for communications data that is transmitted between a satellite and a plurality of ground stations by providing at least one backup, earth-based, utility gateway for backing up multiple earth-based operational gateways comprising: a first microwave radiator configured to direct a first set of microwave signals to a first earth-based operational gateway that comprises one of said multiple earth-based operational gateways, said first set of microwave signals carrying a first subset of said communications		“a communications path that is omitted in the ordinary course without loss of system functionality”	"an additional communication path that transmits a copy of the communications data"	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
data from a first user terminal located in spot beam coverage region; a first signal splitter configured to collect at least a portion of said first subset of said communications data from said first user terminal; a second microwave radiator configured to direct a second set of microwave signals to a second earth-based operational gateway that comprises one of said multiple earth-based operational gateways, said second set of microwave signals carrying a second subset of said communications data from a second user terminal; a second splitter configured to collect at least a portion of said second subset of said communications data from said second user terminal; a third microwave radiator configured to direct a selected one of said first set of microwave signals and said second set of microwave signals to said at least one backup, earth-based, utility gateway; and at least one selector on said satellite configured to selectively				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
couple said third microwave radiator to a selected one of said first splitter and said second splitter in response to detection of propagation loss of one of said first set of microwave signals and said second set of microwave signals, such that said selected one of said first set of microwave signals and said second set of microwave signals is directed by said third microwave radiator to carry communications data collected from said selected one of the said first splitter and said second splitter to said at least one backup, earth-based, utility gateway.				
"utility gateway" <u>U.S. Patent No. 7,773,942</u> <u>Claim 1</u> 1. A satellite communications system that provides a redundant communication path for communications data that is transmitted between a satellite and a plurality of ground stations by providing at least one backup,		"a gateway terminal designed and used as a temporary replacement for a plurality of operational gateway terminals on an as-needed basis"	"a network interfacing terminal designated and being used for backing up multiple operational gateways"	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
earth-based, utility gateway for backing up multiple earth-based operational gateways comprising: a first microwave radiator configured to direct a first set of microwave signals to a first earth-based operational gateway that comprises one of said multiple earth-based operational gateways, said first set of microwave signals carrying a first subset of said communications data from a first user terminal located in spot beam coverage region; a first signal splitter configured to collect at least a portion of said first subset of said communications data from said first user terminal; a second microwave radiator configured to direct a second set of microwave signals to a second earth-based operational gateway that comprises one of said multiple earth-based operational gateways, said second set of microwave signals carrying a second subset of said communications data from a second user terminal; a second splitter configured to collect at				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
least a portion of said second subset of said communications data from said second user terminal; a third microwave radiator configured to direct a selected one of said first set of microwave signals and said second set of microwave signals to said at least one backup, earth-based, utility gateway; and at least one selector on said satellite configured to selectively couple said third microwave radiator to a selected one of said first splitter and said second splitter in response to detection of propagation loss of one of said first set of microwave signals and said second set of microwave signals, such that said selected one of said first set of microwave signals and said second set of microwave signals is directed by said third microwave radiator to carry communications data collected from said selected one of the said first splitter and said second splitter to said at least one backup, earth-based, utility gateway.				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
<u>Claim 7</u> 7. A satellite communications system having at least one backup utility gateway for backing up multiple operational gateways comprising: a first feed horn disposed on a satellite that is configured to direct a first set of microwave signals to a first operational earth-based gateway, that comprises one of said multiple operational gateways, said first set of microwave signals carrying a first set of communications data from a first user terminal located in a spot beam coverage region; a first directional coupler, that is disposed on said satellite, that is configured to collect at least a portion of said first set of communications data from said first user terminal; a second feed horn, that is disposed on said satellite, that is configured to direct a second set of communications data to a second earth-based operational gateway that comprises one of said				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
multiple operational gateways, said second set of microwave signals carrying a second set of communications data from a second user terminal; a second directional coupler, that is disposed on said satellite, that is configured to collect at least a portion of said second set of communications data from the second user terminal; a third feed horn, that is disposed on said satellite, that is configured to direct a selected one of said first set of communications data and said second set of communications data to an earth-based, utility gateway that comprises one of said at least one backup, utility gateways ; and at least one switch, disposed on said satellite, that is configured to selectively couple said third feed horn to a selected one of said first directional coupler and said second directional coupler in response to detection of a propagation loss of one of said first set of communications data and said second set of				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
communications data, such that said selected one of said first set of communications data and said second set of communications data is directed by said third feed horn, which carries said selected one of said first set of said communications data and said second set of said communications data, to said earth-based, utility gateway .				
"splitter"/"signal splitter" <u>U.S. Patent No. 7,773,942</u> <u>Claim 1</u> 1. A satellite communications system that provides a redundant communication path for communications data that is transmitted between a satellite and a plurality of ground stations by providing at least one backup, earth-based, utility gateway for backing up multiple earth-based operational gateways comprising: a first microwave radiator configured to direct a first set of microwave signals to a first		"circuitry which splits an electrical signal into two or more signals"	"circuitry that takes an input signal and divides its power to two or more outputs so that the full data content of the input signals is available simultaneously in each of the output signals"	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
earth-based operational gateway that comprises one of said multiple earth-based operational gateways, said first set of microwave signals carrying a first subset of said communications data from a first user terminal located in spot beam coverage region; a first signal splitter configured to collect at least a portion of said first subset of said communications data from said first user terminal; a second microwave radiator configured to direct a second set of microwave signals to a second earth-based operational gateway that comprises one of said multiple earth-based operational gateways, said second set of microwave signals carrying a second subset of said communications data from a second user terminal; a second splitter configured to collect at least a portion of said second subset of said communications data from said second user terminal; a third microwave radiator configured to direct a selected one of said first set of				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
microwave signals and said second set of microwave signals to said at least one backup, earth-based, utility gateway; and at least one selector on said satellite configured to selectively couple said third microwave radiator to a selected one of said first splitter and said second splitter in response to detection of propagation loss of one of said first set of microwave signals and said second set of microwave signals, such that said selected one of said first set of microwave signals and said second set of microwave signals is directed by said third microwave radiator to carry communications data collected from said selected one of the said first splitter and said second splitter to said at least one backup, earth-based, utility gateway. <u>Claim 5</u> 5. The system of claim 1 wherein at least one of said first splitter and second splitter comprise a directional coupler.				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
“directional coupler” <u>U.S. Patent No. 7,773,942</u> <u>Claim 5</u> 5. The system of claim 1 wherein at least one of said first splitter and second splitter comprise a directional coupler. <u>Claim 7</u> 7. A satellite communications system having at least one backup utility gateway for backing up multiple operational gateways comprising: a first feed horn disposed on a satellite that is configured to direct a first set of microwave signals to a first operational earth-based gateway, that comprises one of said multiple operational gateways, said first set of microwave signals carrying a first set of communications data from a first user terminal located in a spot beam coverage region; a first directional coupler, that is disposed on said satellite, that is configured to collect at least a		“circuitry which couples two or more signal paths such that signals flow in a specified direction”	“circuitry that feeds the power of a signal in one direction to two outputs so that some signal power may be routed to a second location.”	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
portion of said first set of communications data from said first user terminal; a second feed horn, that is disposed on said satellite, that is configured to direct a second set of communications data to a second earth-based operational gateway that comprises one of said multiple operational gateways, said second set of microwave signals carrying a second set of communications data from a second user terminal; a second directional coupler, that is disposed on said satellite, that is configured to collect at least a portion of said second set of communications data from the second user terminal; a third feed horn, that is disposed on said satellite, that is configured to direct a selected one of said first set of communications data and said second set of communications data to an earth-based, utility gateway that comprises one of said at least one backup, utility gateways; and at least one switch, disposed on said				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
satellite, that is configured to selectively couple said third feed horn to a selected one of said first directional coupler and said second directional coupler in response to detection of a propagation loss of one of said first set of communications data and said second set of communications data, such that said selected one of said first set of communications data and said second set of communications data is directed by said third feed horn, which carries said selected one of said first set of said communications data and said second set of said communications data, to said earth-based, utility gateway.				
“at least one [selector/switch, disposed] on said satellite [that is] configured to selectively couple ... in response to detection of propagation loss” <u>U.S. Patent No. 7,773,942</u> <u>Claim 1</u>		no construction needed	“the selector performs the coupling in response to the selector discovering the propagation loss“	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
1. A satellite communications system that provides a redundant communication path for communications data that is transmitted between a satellite and a plurality of ground stations by providing at least one backup, earth-based, utility gateway for backing up multiple earth-based operational gateways comprising: a first microwave radiator configured to direct a first set of microwave signals to a first earth-based operational gateway that comprises one of said multiple earth-based operational gateways, said first set of microwave signals carrying a first subset of said communications data from a first user terminal located in spot beam coverage region; a first signal splitter configured to collect at least a portion of said first subset of said communications data from said first user terminal; a second microwave radiator configured to direct a second set of microwave signals to a second earth-based operational gateway that				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
comprises one of said multiple earth-based operational gateways, said second set of microwave signals carrying a second subset of said communications data from a second user terminal; a second splitter configured to collect at least a portion of said second subset of said communications data from said second user terminal; a third microwave radiator configured to direct a selected one of said first set of microwave signals and said second set of microwave signals to said at least one backup, earth-based, utility gateway; and at least one selector on said satellite configured to selectively couple said third microwave radiator to a selected one of said first splitter and said second splitter in response to detection of propagation loss of one of said first set of microwave signals and said second set of microwave signals, such that said selected one of said first set of microwave signals and said second set of microwave signals is directed by				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
said third microwave radiator to carry communications data collected from said selected one of the said first splitter and said second splitter to said at least one backup, earth-based, utility gateway. <u>Claim 7</u> 7. A satellite communications system having at least one backup utility gateway for backing up multiple operational gateways comprising: a first feed horn disposed on a satellite that is configured to direct a first set of microwave signals to a first operational earth-based gateway, that comprises one of said multiple operational gateways, said first set of microwave signals carrying a first set of communications data from a first user terminal located in a spot beam coverage region; a first directional coupler, that is disposed on said satellite, that is configured to collect at least a portion of said first set of communications data from said				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
first user terminal; a second feed horn, that is disposed on said satellite, that is configured to direct a second set of communications data to a second earth-based operational gateway that comprises one of said multiple operational gateways, said second set of microwave signals carrying a second set of communications data from a second user terminal; a second directional coupler, that is disposed on said satellite, that is configured to collect at least a portion of said second set of communications data from the second user terminal; a third feed horn, that is disposed on said satellite, that is configured to direct a selected one of said first set of communications data and said second set of communications data to an earth-based, utility gateway that comprises one of said at least one backup, utility gateways; and at least one switch, disposed on said satellite, that is configured to selectively couple said third				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
feed horn to a selected one of said first directional coupler and said second directional coupler in response to detection of a propagation loss of one of said first set of communications data and said second set of communications data, such that said selected one of said first set of communications data and said second set of communications data is directed by said third feed horn, which carries said selected one of said first set of said communications data and said second set of said communications data, to said earth-based, utility gateway.				
“data transmission system” <u>U.S. Patent No. 6,879,808</u> Claim 1 1. A data transmission system comprising: a two-way communication link comprising at least one satellite; at least one user terminal having two-way communication with the two-way		No construction necessary	“a system for providing Internet access and services”	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
communication link and comprising a cache for selectively caching data broadcast by way of the satellite of the two-way communication link, and further comprising software which retrieves information requested by way of the user terminal and information related to the requested information; and at least one gateway having access to data and having two-way communication with the two-way communication link.				
"a cache" <u>U.S. Patent No. 6,879,808</u> Claim 1 1. A data transmission system comprising: a two-way communication link comprising at least one satellite; at least one user terminal having two-way communication with the two-way communication link and comprising a cache for selectively caching data broadcast by way of the satellite of the		"specialized memory, other than DRAM, that requires no active system capacity when data is retrieved"	"a specialized memory comprising a high-speed storage mechanism, which may be either a reserved section of main memory or an independent high-speed storage device"	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
two-way communication link, and further comprising software which retrieves information requested by way of the user terminal and information related to the requested information; and at least one gateway having access to data and having two-way communication with the two-way communication link. <u>Claim 11</u> 11. The system recited in claim 1 wherein the at least one gateway comprises a cache. <u>Claim 12</u> 12. A method of data communication comprising the steps of: providing one or more orbiting satellites that comprise a two-way communication link; providing at least one user terminal having two-way communication with the two-way communication link and comprising a cache for selectively caching data broadcast by way of the two-way communication link, and further				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
comprising software which retrieves information requested by way of the user terminal and information related to the requested information; providing at least one gateway having access to data and having two-way communication with the two-way communication link; generating requests for data at the at least one user terminal; transmitting the requests for data from the at least one user terminal by way of the two-way communication link to the at least one gateway; obtaining the requested data at the at least one gateway; and transmitting the requested data from the at least one gateway to the at least one user terminal by way of the two-way communication link.				
"data broadcast" <u>U.S. Patent No. 6,879,808</u> Claim 1 1. A data transmission system comprising: a two-way		"data transmitted by a satellite that is intended for delivery to multiple users in a coverage area"	"data transmitted by a satellite to a coverage area"	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
communication link comprising at least one satellite; at least one user terminal having two-way communication with the two-way communication link and comprising a cache for selectively caching data broadcast by way of the satellite of the two-way communication link, and further comprising software which retrieves information requested by way of the user terminal and information related to the requested information; and at least one gateway having access to data and having two-way communication with the two-way communication link. <u>Claim 4</u> 4. The system recited in claim 1 wherein the two-way communication link comprises a low bandwidth request link and a high bandwidth data broadcast link. <u>Claim 12</u> 12. A method of data communication comprising the				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
steps of: providing one or more orbiting satellites that comprise a two-way communication link; providing at least one user terminal having two-way communication with the two-way communication link and comprising a cache for selectively caching data broadcast by way of the two-way communication link, and further comprising software which retrieves information requested by way of the user terminal and information related to the requested information; providing at least one gateway having access to data and having two-way communication with the two-way communication link; generating requests for data at the at least one user terminal; transmitting the requests for data from the at least one user terminal by way of the two-way communication link to the at least one gateway; obtaining the requested data at the at least one gateway; and transmitting the requested data from the at least one gateway to				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
the at least one user terminal by way of the two-way communication link. <u>Claim 18</u> 18. The method recited in claim 12 herein the step of transmitting the requested data comprises transmitting the data by way of a high bandwidth data broadcast link.				
“information related to the requested information” <u>U.S. Patent No. 6,879,808</u> Claim 1 1. A data transmission system comprising: a two-way communication link comprising at least one satellite; at least one user terminal having two-way communication with the two-way communication link and comprising a cache for selectively caching data broadcast by way of the satellite of the two-way communication link, and further comprising software which		No construction necessary	“qualitatively similar to the specific information requested by a specific user”	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
retrieves information requested by way of the user terminal and information related to the requested information; and at least one gateway having access to data and having two-way communication with the two-way communication link. <u>Claim 12</u> 12. A method of data communication comprising the steps of: providing one or more orbiting satellites that comprise a two-way communication link; providing at least one user terminal having two-way communication with the two-way communication link and comprising a cache for selectively caching data broadcast by way of the two-way communication link, and further comprising software which retrieves information requested by way of the user terminal and information related to the requested information; providing at least one gateway having access to data and having two-way communication with the				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
two-way communication link; generating requests for data at the at least one user terminal; transmitting the requests for data from the at least one user terminal by way of the two-way communication link to the at least one gateway; obtaining the requested data at the at least one gateway; and transmitting the requested data from the at least one gateway to the at least one user terminal by way of the two-way communication link.				
“implementing signaling based on a non- asynchronous transfer mode (ATM) protocol” <u>U.S. Patent No. 6,400,696</u> <u>Claim 1</u> 1. A dynamic resource management system comprising: a local area network edge device; one or more personal computers coupled to the local area network edge device by way of a network; a gateway; a data source coupled to the gateway; and a satellite that		No construction necessary	“using a multiple access control signaling standard on the link layer that does not use the principles of ATM”	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
provides a communications link between the local area network edge device and the gateway; the local area network edge device and the gateway implementing signaling based on a non-asynchronous transfer mode (ATM) protocol , and wherein the non-asynchronous transfer mode protocol is overlaid with one or more dynamic assignment/multiple access communication protocols.				
“the non-asynchronous transfer protocol mode is overlaid with one or more dynamic assignment/multiple access communication protocols” <u>U.S. Patent No. 6,400,696</u> <u>Claim 1</u> 1. A dynamic resource management system comprising: a local area network edge device; one or more personal computers coupled to the local area network edge device by way of a network; a gateway; a data source coupled		No construction necessary	“one or more dynamic assignment/multiple access algorithms implement communications protocols that are built on top of the nonasynchronous transfer mode protocol”	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
to the gateway; and a satellite that provides a communications link between the local area network edge device and the gateway; the local area network edge device and the gateway implementing signaling based on a non-asynchronous transfer mode (ATM) protocol, and wherein the non-asynchronous transfer mode protocol is overlaid with one or more dynamic assignment/multiple access communication protocols.				
“a classifier for identifying specific types of said messages” U.S. Patent No. 7,219,132 <u>Claim 1</u> 1. A dynamic resource allocation system comprising: one or more personal computers coupled to a local area network edge device that generates a resource request in response to received data from a user of said personal computer; a satellite that provides a		No construction necessary or alternatively, “an entity which identifies specific types of said messages according to defined rules”	classifier: “an entity which selects packets based on the content of packet headers according to defined rules” SS/L does not believe that the rest of the phrase, “for identifying specific types of said messages,” needs construction	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
communication link; one or more Internet protocol networks; a gateway in connection with said local area network edge device via said communication link and interfaces to one or more said Internet protocol networks, wherein said gateway receives said resource request from said local area network edge device to set required resources; a generator for generating messages of different types from said user data; a classifier for identifying specific types of said messages; a marker for marking said identifying messages; and a scheduler for scheduling said marked messages; wherein said gateway dynamically allocates resources to meet the requirements of each said marked messages by applying a dynamic assignment/multiple access (DAMA) communication protocol for transmitting data between said one or more personal computers and said one or more Internet protocol networks; wherein said DAMA communication protocol				

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
comprises three modes, including fixed assignment, reservation assignment, and random assignment modes.				
“marker for marking said identif[ied] messages” U.S. Patent No. 7,219,132 <u>Claim 1</u> 1. A dynamic resource allocation system comprising: one or more personal computers coupled to a local area network edge device that generates a resource request in response to received data from a user of said personal computer; a satellite that provides a communication link; one or more Internet protocol networks; a gateway in connection with said local area network edge device via said communication link and interfaces to one or more said Internet protocol networks, wherein said gateway receives said resource request from said local area network edge device to set required resources; a generator		No construction necessary or alternatively, “an entity that performs the process of marking said messages identified by the classifier based on defined rules“	“an entity that performs the process of setting header fields of messages selected by the classifier based on defined rules”	

Joint Claim Construction Worksheet

Patent Claim	Agreed Proposed Construction	Plaintiffs' Proposed Construction	Defendants' Proposed Construction	Court's Construction
for generating messages of different types from said user data; a classifier for identifying specific types of said messages; a marker for marking said identifying messages; and a scheduler for scheduling said marked messages; wherein said gateway dynamically allocates resources to meet the requirements of each said marked messages by applying a dynamic assignment/multiple access (DAMA) communication protocol for transmitting data between said one or more personal computers and said one or more Internet protocol networks; wherein said DAMA communication protocol comprises three modes, including fixed assignment, reservation assignment, and random assignment modes.				