

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF CALIFORNIA**

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

Plaintiffs,

vs.

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

Defendants.

CASE NO. 3:12-CV-00260-H
(WVG)

**ORDER GRANTING IN
PART AND DENYING IN
PART MOTION FOR
PARTIAL SUMMARY
JUDGMENT**

On December 7, 2012, Plaintiffs and Counterclaim-Defendants ViaSat, Inc. and ViaSat Communications, Inc., f/k/a Wildblue Communications, Inc. (collectively, “ViaSat”) filed an amended complaint alleging infringement of, among other things, U.S. Patent No. 8,068,827 (“the ’827 Patent”). (Doc. No. 88.) On April 15, 2013, SS/L filed a motion for summary judgment of invalidity of the asserted claims of the ‘827 Patent or, in the alternative, of non-infringement. (Doc. No. 138.) On May 10, 2013, ViaSat filed its opposition. (Doc. No. 181.) On May 17, 2013, SS/L filed a reply in support of the motion. (Doc. No. 189.) The court held a hearing on the motion on May 24, 2013. Ian B. Crosby, Amanda K. Bonn, Marc M. Seltzer, Patrick C. Bageant,

1 and Joseph S. Grinstein appeared for SS/L. Sean S. Pak, Charles K. Verhoeven, and
 2 Vincent M. Pollmeier appeared for ViaSat.

3 ViaSat served amended infringement contentions concerning the '827 Patent on
 4 February 1, 2013. (Doc. No. 140-2.) The court held the claim construction hearing on
 5 May 24, 2013. After due consideration, the court grants in part and denies in part
 6 SS/L's motion for summary judgment.

7 **Background**

8 ViaSat is the owner of the '827 Patent. (Doc. No. 88 ¶ 26.) The '827 Patent is
 9 entitled "Non-Interfering Utilization of Non-Geostationary Satellite Frequency Band
 10 for Geostationary Satellite Communication." (Doc. No. 181 Ex. 2, '827 Patent.) The
 11 '827 Patent discloses a technique for increasing the frequency spectrum available to a
 12 satellite communications system, specifically by providing a geostationary satellite
 13 orbit (GSO) satellite communication system and associated method for employing
 14 underutilized frequency bands of non-geostationary satellite orbit (NGSO) satellites in
 15 a non-interfering manner. See '827 Patent. ViaSat alleges that SS/L manufactures and
 16 sells satellites that infringe on ViaSat's patents. (Doc. No. 88 ¶¶ 55, 61-64.) In
 17 particular, ViaSat alleges that SS/L's satellites infringe Claims 7, 8 and 9 of the '827
 18 Patent. (Doc. No. 140-2.)

19 Independent Claim 7 of the '827 Patent provides:

20 A geostationary orbit (GSO)[] satellite comprising:

21 a receiver configured to receive from one or more ground stations signals in a
 22 GSO frequency band and in an extended frequency spectrum, the
 23 extended frequency spectrum including the GSO frequency band and a
 24 nongeostationary orbit (NGSO) frequency band;
 25 circuitry configured to establish an activated frequency mode to activate one of
 26 a GSO frequency band mode and an extended frequency spectrum mode
 27 based on information indicating a presence or an absence of an
 28 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.

'827 Patent, 15:36-50.

Claim 8 depends on Claim 7 and provides:

1 The satellite of claim 7 further comprising:
 2 a low-noise amplifier operative to amplify the transmitted signals and output an
 3 amplified signal;
 4 a frequency mixer having a first input adapted to receive the amplified signal,
 5 a second input coupled to a local oscillator, and an output having a
 6 plurality of frequency products including a downlink extended frequency
 7 spectrum, the downlink extended frequency spectrum comprising a
 8 downlink GSO frequency band and a downlink NGSO frequency band;
 9 a splitter having an input coupled to the mixer output, a first splitter output and
 10 a second splitter output;
 11 a switch having a first input, a second input, and an output;
 12 a first bandpass filter having a first bandpass input coupled to the first splitter
 13 output and a first bandpass output coupled to the first input of the switch;
 14 a second bandpass filter having a second bandpass input coupled to the second
 15 splitter output and a second output coupled to the second input of the
 16 switch;
 17 the first bandpass filter being configured to pass the GSO frequency band;
 18 the second bandpass filter being configured to pass the extended frequency
 19 spectrum; and
 20 the output of the switch being selectively coupled to either the first switch input
 21 or the second switch input.

12 '827 Patent, 15:51-16:17.

13 Dependent Claim 9 provides:

14 The satellite of claim 7 further comprising:
 15 a control device configured to decode instructions from a command module to
 16 couple the output of the switch to the first input or the second input
 17 according to the decoded instructions, the control module providing the
 18 information indicating presence or absence of an interference situation
 19 with an NGSO satellite system.

17 '827 Patent, 16:18-25. SS/L contends that the asserted claims of the '827 Patent are
 18 indefinite or, in the alternative, that a literal reading of the claims proves that SS/L's
 19 products do not infringe the '827 Patent. (Doc. No. 138.)

20 Discussion

21 **I. Legal Standards**

22 **A. Motion for Summary Judgment**

23 Summary judgment is appropriate under Rule 56 of the Federal Rules of Civil
 24 Procedure if the moving party demonstrates the absence of a genuine issue of material
 25 fact and entitlement to judgment as a matter of law. Celotex Corp. v. Catrett, 477 U.S.
 26 317, 322 (1986). A fact is material when, under the governing substantive law, it could
 27 affect the outcome of the case. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248
 28

1 (1986); Freeman v. Arpaio, 125 F.3d 732, 735 (9th Cir.1997). A dispute is genuine if
2 a reasonable jury could return a verdict for the nonmoving party. Anderson, 477 U.S.
3 at 248.

4 A party seeking summary judgment always bears the initial burden of
5 establishing the absence of a genuine issue of material fact. Celotex, 477 U.S. at 323.
6 The moving party can satisfy this burden in two ways: (1) by presenting evidence that
7 negates an essential element of the nonmoving party's case; or (2) by demonstrating
8 that the nonmoving party failed to establish an essential element of the nonmoving
9 party's case on which the nonmoving party bears the burden of proving at trial. Id. at
10 322-23. "Disputes over irrelevant or unnecessary facts will not preclude a grant of
11 summary judgment." T.W. Elec. Serv., Inc. v. Pacific Elec. Contractors Ass'n, 809
12 F.2d 626, 630 (9th Cir. 1987). Once the moving party establishes the absence of
13 genuine issues of material fact, the burden shifts to the nonmoving party to set forth
14 facts showing that a genuine issue of disputed fact remains. Celotex, 477 U.S. at 322.
15 The nonmoving party cannot oppose a properly supported summary judgment motion
16 by "rest[ing] on mere allegations or denials of his pleadings." Anderson, 477 U.S. at
17 256.

18 When ruling on a summary judgment motion, the court must view all inferences
19 drawn from the underlying facts in the light most favorable to the nonmoving party.
20 Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986). The
21 Court does not make credibility determinations with respect to evidence offered. See
22 T.W. Elec., 809 F.2d at 630-31 (citing Matsushita, 475 U.S. at 587). Summary
23 judgment is therefore not appropriate "where contradictory inferences may reasonably
24 be drawn from undisputed evidentiary facts. . . ." Hollingsworth Solderless Terminal
25 Co. v. Turley, 622 F.2d 1324, 1335 (9th Cir. 1980).

26 ///

27 ///

28 ///

B. Invalid as Indefinite Under 35 U.S.C. § 112

Under 35 U.S.C. § 282, a patent is presumed valid, and an attack on its validity requires proof of facts by clear and convincing evidence or “its equivalent, by whatever form of words it may be expressed.” Buildex Inc. v. Kason Indus., Inc., 849 F.2d 1461, 1463 (Fed. Cir. 1988). The “clear and convincing” standard of proof of facts is an intermediate standard which lies somewhere between “beyond a reasonable doubt” and a “preponderance of the evidence.” Id. (quoting Addington v. Texas, 441 U.S. 418, 425 (1979)). SS/L argues that certain claims of the ‘827 Patent are invalid as indefinite under 35 U.S.C. § 112.

Section 112, ¶ 2 requires that the specification of a patent “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.” “Because claims delineate the patentee’s right to exclude, the patent statute requires that the scope of the claims be sufficiently definite to inform the public of the bounds of the protected invention, i.e., what subject matter is covered by the exclusive rights of the patent.” Halliburton Energy Servs, Inc., v. M-I LLC, 514 F.3d 1244, 1249 (Fed. Cir. 2008). A claim that is indefinite is invalid under § 112. Id. at 1256.

Claims are considered indefinite when they are not amenable to construction or are insolubly ambiguous, that is “one of skill in the relevant art could not discern the boundaries of the claim based on the claim language, the specification, the prosecution history, and the knowledge in the relevant art.” Wellman, Inc. v. Eastman Chem. Co., 642 F.3d 1355, 1366 (Fed. Cir. 2011) (internal quotation marks and citations omitted); see also Young v. Lumenis, Inc., 492 F.3d 1336, 1346 (Fed. Cir. 2007) (“Thus, the definiteness of claim terms depends on whether those terms can be given any reasonable meaning.”) (quoting Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1348 (Fed. Cir. 2005)). “That some claim language may not be precise, however, does not automatically render a claim invalid. When a word of degree is used the district court must determine whether the patent’s specification provides some standard

for measuring that degree.” Seattle Box Co., Inc. v. Industrial Crating & Packing, Inc., 731 F.2d 818, 826 (Fed. Cir. 1984). “If the meaning of the claim is discernible, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, . . . the claim [is] sufficiently clear to avoid invalidity on indefiniteness grounds.” Biosig Instruments, Inc. v. Nautilus, Inc., __ F.3d __, 2013 WL 1776745, at *8 (Fed. Cir. Apr. 26, 2013) (quoting Exxon Research & Engineering Co. v. United States, 265 F.3d 1371, 1375 (Fed. Cir. 2001)). “By finding claims indefinite only if reasonable efforts at claim construction prove futile, we accord respect to the statutory presumption of patent validity, and we protect the inventive contribution of patentees, even when the drafting of their patents has been less than ideal.” Exxon, 265 F.3d at 1375 (internal citations omitted); accord Biosig, 2013 WL 1776745, at *8.

II. Indefiniteness

A. Claim 7

1. The Transmitter Element

SS/L argues that Claim 7 of the ‘827 Patent is invalid as indefinite. Claim 7 discloses a satellite capable of receiving signals either in a “GSO frequency band” or in an “extended frequency spectrum including the GSO frequency band and a nongeostationary orbit (NGSO) frequency band.” Id. The second element discloses “circuitry configured to establish an activated frequency mode,” the mode being either the GSO-only mode or the “extended frequency spectrum mode,” which includes GSO and NGSO bands as disclosed in the first element. Id. The third element involves a transmitter configured to transmit signals “based on the activation mode.” Id.

SS/L contends that the third element, “a transmitter configured to transmit in one of the GSO frequency band and in the NGSO frequency spectrum,” renders the claim indefinite because it suggests a third possibility: transmitting signals in an NGSO frequency band only. SS/L argues this is nonsensical because Claim 7 teaches a system that determines whether it should transmit in one of only two possible modes: GSO-

1 only mode or GSO + NGSO mode. After having made that choice, the satellite
2 apparently then transmits either in GSO-only or NGSO-only, meaning, SS/L argues,
3 the claim teaches a system that makes a determination and then explicitly does not
4 follow its own determination. Such a system would be ambiguous and indefinite.

5 Where “claims are susceptible to only one reasonable interpretation and that
6 interpretation results in a nonsensical construction of the claim as a whole, the claim
7 must be invalidated.” Chef America, Inc. v. Lamb-Weston, Inc., 358 F.3d 1371, 1374
8 (Fed. Cir. 2004). If a claim presents multiple interpretations, the Court should interpret
9 the claim where reasonably possible to preserve validity. Exxon, 265 F.3d at 1375; see
10 also AIA Engineering Ltd. v. Magotteaux Intern. S/A, 657 F.3d 1264, 1266 (Fed. Cir.
11 2011) (noting courts should “avoid nonsensical results in construing claim language”).
12 Choosing a reasonable interpretation of an ambiguous claim that preserves validity is
13 not to be confused with redrafting one clear claim term with another. Quantum Corp.
14 v. Rodime, PLC, 65 F.3d 1577, 1584 (Fed. Cir. 1995).

15 SS/L’s argument relies on Claim 7’s use of “one of,” arguing that referring to “in
16 one of X and Y” renders the “and” disjunctive rather than conjunctive. In a similar
17 case, the Federal Circuit recently held that the phrase “one of” may be interpreted as
18 meaning “one or more of” depending on the claim language and specification. See
19 Accent Packaging, Inc. v. Leggett & Platt, Inc., 707 F.3d 1318 (Fed. Cir. 2013).
20 Accent Packaging involved a construction of a claim that stated “each of the operator
21 bodies” was “operatively coupled with a respective one of” four listed operator
22 elements. Id. at 1325. However, the preferred embodiments in the specification
23 showed operator bodies coupled to more than one of the listed operator elements. Id.
24 The court interpreted “one of” to mean “one or more” of each of the operator elements
25 to reflect the preferred embodiments. Id. at 1325-26.

26 Here, the remainder of Claim 7 and the specification describe the satellite
27 transmitting either in a GSO band or in both GSO and NGSO bands together, never
28 referring to transmitting in an NGSO-only mode. See, e.g., ‘827 Patent, Abstract, Figs.

1 5-6, 2:42-53, 15:51-16:17. SS/L's construction would exclude all embodiments
2 discussed in the specification. See Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576,
3 1583-84 (Fed. Cir. 1996) (noting construction that excludes preferred embodiments is
4 "rarely, if ever, correct"). Further, the concluding phrase of the "transmitter" element,
5 "based on the activated frequency spectrum mode," limits the choice among frequency
6 bands to those that comport with the activated frequency spectrum mode; namely, the
7 GSO-only mode or the GSO + NGSO mode. '827 Patent, 15:47-49. Like Accent
8 Packaging, this court interprets the claim language according to the embodiments in
9 the specification and the surrounding claim language and concludes that "one of" is
10 used in the transmitter limitation to mean "one or more of." See Accent Packaging,
11 707 F.3d at 1325-26. The court construes "a transmitter configured to transmit in one
12 of the GSO frequency band and in the NGSO frequency spectrum" as "in one or more
13 of the GSO frequency band and the NGSO frequency spectrum." Based on that
14 construction, the transmitter is configured to operate either in the GSO frequency band
15 or in both the GSO frequency band and the NGSO frequency spectrum, depending on
16 the activated frequency mode.

17 A claim is indefinite "only if reasonable efforts at claim construction prove
18 futile," and "accord[s] respect to the statutory presumption of patent validity." Exxon,
19 265 F.3d at 1375. The court's construction of "a transmitter configured to transmit in
20 one of the GSO frequency band and in the NGSO frequency spectrum" as "in one or
21 more of the GSO frequency band and the NGSO frequency spectrum" is consistent
22 with the remainder of Claim 7 and the system disclosed in the patent. See AIA
23 Engineering, 657 F.3d at 1266. The "transmitter" limitation therefore does not render
24 Claim 7 indefinite.

25 ///

26 ///

27 ///

28 ///

2. **“Circuitry Configured To Establish An Activated Frequency Mode . . . Based On Information Indicating A Presence Or An Absence Of An Interference Situation With An NGSO Satellite System”**

SS/L additionally argues that the circuitry limitation including the term “information indicating a presence or absence of an interference” in Claim 7 is indefinite because the claim scope is “completely dependent on a person’s subjective opinion,” and thus impossible to objectively ascertain.¹ Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1350 (Fed. Cir. 2005). The circuitry limitation language is not indefinite. A claim term is not ambiguous if there is sufficient guidance in the patent to put the public on notice of the claim scope. See Starr Scientific, Inc., v. R.J. Reynolds Tobacco Co., 655 F.3d 1364, 1374 (Fed. Cir. 2011) (holding claim term not indefinite because a person of skill in the art would not find the term ambiguous). Here, one of ordinary skill in the art would be able to discern the boundaries of the claims because the patent provides examples of “interference situations” and how to measure them. See, e.g., ‘827 Patent, 8:1-60; see also Datamize, 417 F.3d at 1350 (distinguishing Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.3d 1565 (Fed. Cir. 1986) because in that case “one of ordinary skill in the art would easily have been able to determine the appropriate dimensions that the claim language required”). Infringement is thus not “completely dependent on a person’s subjective opinion.” Datamize, 417 F.3d at 1350. Moreover, SS/L provides inadequate support for the contention that Claim 7 is an invalid mixed method-apparatus claim. See Microprocessor Enhancement Corp. v. Texas Instruments Inc., 520 F.3d 1367, 1375 (Fed. Cir. 2008) (“[A]pparatus claims are not necessarily indefinite for using functional language. . . . Claim 7 . . . is clearly limited to a pipelined processor possessing the

¹ In its claim construction order, the Court construed “circuitry configured to establish an activated frequency mode . . . based on information indicating a presence or absence of an interference situation with an NGSO satellite system” as “circuitry configured to select one or more appropriate frequency bands based on information indicating the presence or absence of an interference situation with an NGSO satellite system.” (Doc. No. 206.)

1 recited structure and capable of performing the recited functions, and is thus not
 2 indefinite under IPXL Holdings.”). The court concludes that Claim 7 is not invalid
 3 under 35 U.S.C. § 112, ¶ 2.

4 **B. Claim 8**

5 SS/L contends that Claim 8 of the ‘827 Patent is invalid as indefinite. Claim 8
 6 provides, in part:

7 The satellite of claim 7 further comprising:
 8 a low-noise amplifier operative to amplify the transmitted signals and output an
 9 amplified signal;
 10 a frequency mixer having a first input adapted to receive the amplified signal,
 11 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

12 ‘827 Patent, 15:50-16:3. SS/L argues that “the transmitted signals” referenced in Claim
 13 8 must refer to signals transmitted from the satellite, rather than to the satellite. SS/L
 14 contends that Claim 8 is nonsensical, because the signals cannot pass through the “low-
 15 noise amplifier” or the “frequency mixer” on the satellite if those signals have already
 16 been transmitted away from the satellite and are no longer within the satellite’s control.

17 SS/L’s argument is based on a limited reading of “the transmitted signals” in
 18 Claim 8. SS/L argues that the distinct use of “transmit” and “receive” in Claim 7, on
 19 which Claim 8 depends, implies “transmit” and “receive” mean signals sent from the
 20 satellite and signals sent to the satellite, respectively. ‘827 Patent, 15:36-50. However,
 21 it is reasonable to interpret “transmitted signals” in Claim 8 to refer to the signals
 22 transmitted from ground terminals to and received by the satellite.

23 Claim 7 only mentions “signals” in connection with the “receiver” that
 24 “receives” signals; the Claim does not specifically mention “transmitting” signals. Id.
 25 Moreover, the specification repeatedly refers to signals transmitted to the satellite. See,
 26 e.g., id., 3:1-4 (“The GSO satellite may further comprise a frequency mixer that
 27 converts the received transmitted signals to downlink signals”), 5:15-16 (“The
 28 Earth terminal 115 may use an antenna 110 to transmit the uplink signal to the satellite

1 105.”), 9:55-56 (“Generally, a satellite receives an uplink signal transmitted from an
2 Earth terminal . . .”). The specification describes amplifying signals received from
3 ground terminals using the “low-noise amplifier,” as well as putting those received
4 signals through the other steps disclosed in Claim 8. See, e.g., id., 5:29-32 (“The
5 signals received from the gateway 115 are amplified with a low-noise amplifier (LNA)
6 . . .”), 9:61-64 (“The satellite RF subsystem includes a receiver bandpass filter 410
7 adapted to pass the desired uplink signal, a low noise amplifier 420 adapted to amplify
8 the filtered uplink signal 415, a mixer 430 that down converts the uplink signal . . .”).
9 A person of ordinary skill in the art would not read Claim 8 in a vacuum divorced from
10 the rest of the patent. Cf. Vitronics, 90 F.3d at 1582 (noting specification “is the single
11 best guide to the meaning of a disputed term”). From these descriptions in the
12 specification, a person of ordinary skill in the art would understand “transmitted
13 signals” in Claim 8 to refer to signals transmitted to, rather than from, the satellite,
14 permitting the system to perform the functions disclosed in Claim 8. See AIA
15 Engineering, 657 F.3d at 1266 (“We strive, where possible, to avoid nonsensical results
16 in construing claim language.”); Quantum, 65 F.3d at 1584 (distinguishing redrafting
17 claims from construing claims and noting “we construe claims, if possible, so as to
18 sustain their validity”).

19 A claim is indefinite “only if reasonable efforts at claim construction prove
20 futile,” and “accord[s] respect to the statutory presumption of patent validity.” Exxon,
21 265 F.3d at 1375. Based on the language in the claims and the specification, the court
22 concludes that a reasonable person of ordinary skill in the art would read “transmitted
23 signals” in Claim 8 to refer to signals transmitted to the satellite, permitting the system
24 to perform the functions disclosed in Claim 8. Accordingly, the court denies SS/L’s
25 motion to hold Claim 8 invalid as indefinite under 35 U.S.C. § 112.

26 ///

27 ///

28 ///

1 **C. Claim 9**

2 **1. “Switch,” “First Input,” “Second Input”**

3 SS/L argues that Claim 9 of the ‘827 Patent is indefinite because it includes
4 terms of art that lack any antecedent basis. Claim 9 includes the terms “the switch,”
5 “the first input,” and “the second input,” and depends on Claim 7. However, neither
6 Claim 7 nor Claim 9 previously refer to a “switch” or a first or second “input.” See id.,
7 15:37-49 (Claim 7), 16:18-25 (Claim 9). SS/L contends that this renders Claim 9
8 indefinite.

9 “[A] claim could be indefinite if a term does not have proper antecedent basis
10 where such basis is not otherwise present by implication or the meaning is not
11 reasonably ascertainable.” Halliburton, 514 F.3d at 1249. Claim 8 includes a “switch,”
12 a “first input,” and a “second input.” Id., 15:50-16:17. ViaSat argues that Claim 9's
13 reference to Claim 7 is merely a typographical error and asks the Court to correct the
14 preamble of Claim 9 to read: “The satellite of claim 8 further comprising.” (Doc. No.
15 181 at 20.) “When a harmless error in a reasonable patent is not subject to reasonable
16 debate, it can be corrected by the court, as for other reasonable documents.” Hoffer v.
17 Microsoft Corp., 405 F.3d 1326, 1331 (Fed. Cir. 2005) (citing Novo Indus., L.P. v.
18 Micro Molds Corp., 350 F.3d 1348, 1356-57 (Fed. Cir. 2003)). In Hoffer, the Federal
19 Circuit held that a district Court should have corrected a clear drafting error in the
20 patent rather than find the patent invalid. Id. Specifically, like the ‘827 Patent, the
21 patent included a dependent claim that clearly should have referred to a different
22 antecedent claim. Id. The court held that “[a]bsent evidence of culpability or intent to
23 deceive by delaying formal correction, a patent should not be invalidated based on an
24 obvious administrative error.” Id.

25 This court has the authority to correct a clear drafting error. See id. (“The
26 district court held that it has no authority to correct or ignore even a typographical error
27 in a patent. That is inaccurate.”) The claims in the ‘827 Patent were amended during
28 prosecution, involving changing some dependent claims into independent claims and

1 changing the internal references in some of the dependent claims, affecting in particular
 2 Claims 7, 8, and 9. (See Doc. No. 181 Ex. 3 at 5-8.) As written, Claim 9 follows
 3 directly after Claim 8 and there can be no reasonable dispute that Claim 9 was meant
 4 to depend on Claim 8, absent a typographical error. One of ordinary skill in the art
 5 would not be confused by the drafting error as the antecedent basis for the terms in
 6 Claim 9 are “reasonably ascertainable.” Halliburton, 514 F.3d at 1249. The court
 7 therefore concludes that the terms “the switch,” “the first input,” and “the second
 8 input” do not render Claim 9 of the ‘827 Patent indefinite under 35 U.S.C. § 112.

9 2. **“Control Module”**

10 SS/L contends that Claim 9's use of the term “control module” renders Claim 9
 11 indefinite. Claim 9 discloses a “control device” that decodes instructions from a
 12 “command module,” and concludes with a “control module” that provides “information
 13 indicating presence or absence of an interference situation.” ‘827 Patent, 16:18-25.
 14 The term “control module” does not appear anywhere else in the claims or
 15 specification. SS/L argues that the context of the use of the term “control module”
 16 renders it impossible to determine whether “control module” was an error intended to
 17 refer to the “control device,” the “command module,” or some third, previously
 18 undisclosed concept. ViaSat argues that the context and the specification indicate that
 19 “control module” is an errant reference to the “command module” referenced in Claim
 20 9.

21 “[A] claim could be indefinite if a term does not have proper antecedent basis
 22 where such basis is not otherwise present by implication or the meaning is not
 23 reasonably ascertainable.” Halliburton, 514 F.3d at 1249. “The failure to define [a]
 24 term is . . . not fatal, for if the meaning of the term is fairly inferable from the patent,
 25 an express definition is not necessary.” Bancorp Servs., L.L.C. v. Hartford Life Ins.
 26 Co., 359 F.3d 1367, 1373 (Fed. Cir. 2004). In this instance, ViaSat’s proposed
 27 construction asks the Court to redraft “control module” as “command module.” SS/L
 28 argues that “control module” could also refer to a “control device.” The court has

1 authority to redraft, rather than merely construe, a claim term only “[w]hen a harmless
2 error in a reasonable patent is not subject to reasonable debate.” Hoffer, 405 F.3d at
3 1331. But the court will not otherwise redraft claims “whether to make them operable
4 or to sustain their validity.” Chef America, 358 F.3d at 1374.

5 Here, the meaning of “control module” in Claim 9 is not beyond reasonable
6 debate. ViaSat argues that it must refer to the “command module.” Throughout the
7 patent, the “command module” is tasked with transmitting instructions as to which
8 frequency spectrum mode should be activated. See ‘827 Patent, Abstract, 2:47-62,
9 3:10-20; see also 15:4-10 (Claim 1), 16:25-41 (Claim 10); Phillips v. AWH Corp., 415
10 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc) (noting “the usage of a term in one claim
11 can often illuminate the meaning of the same term in other claims”). The command
12 module is also described as being configured to collect information regarding the
13 presence or absence of an interference situation. ‘827 Patent, 6:15-17 (referring to
14 “command center,” although the claims refer only to a “command module”); 15:4-10
15 (Claim 1); 16:25-41 (Claim 10). It is not clear from these references whether the
16 “command module” actually transmits the interference information to any other entity,
17 or instead collects the information and, based on the content of the information, merely
18 instructs the satellite or the ground station which frequencies to use. In Claim 10, for
19 example, the “command module” is first described as receiving interference
20 information, and then, “based on the received information,” it “caus[es] the activat[ion]
21 in the GSO satellite and a ground station one of” the activated frequency modes. Id.,
22 16:25-41. Claim 10 does not clarify whether the “command module” causes the
23 activation through a simple instruction, or instead whether it actually transmits
24 interference information. See id.

25 SS/L argues that it is at least equally plausible that the “control device” on board
26 the satellite collects interference information, provides the information to the
27 “command module,” which then instructs the “control device” on what frequency mode
28 to activate. If that were the case, “control module” would be an errant reference to the

1 “control device.” Alternatively, the “control module” might refer to some other device
2 that supplies information to the “command module.” ViaSat argues instead that the
3 frequency activation instruction actually is the interference information, but that is far
4 from clear based on the plain language. Absent clear and indisputable evidence that
5 “control module” was a typographical error intended to read “command module,” the
6 Court is not at liberty to redraft the claim. Hoffer, 405 F.3d at 1331; Chef America,
7 358 F.3d at 1374.

8 Because the court cannot ascertain with certainty that the “control module” in
9 Claim 9 is, as ViaSat suggests, the “command module” referred to elsewhere in the
10 patent, the Court cannot redraft the claim. Hoffer, 405 F.3d at 1331. While perhaps
11 the patent should have read “command module” as ViaSat argues, the Court
12 “construe[s] the claim as written, not as the patentees wish they had written it.” Chef
13 America, 358 F.3d at 1374. As written in Claim 9, “control module” lacks an
14 antecedent basis, the basis is “not otherwise present by implication,” and “the meaning
15 is not reasonably ascertainable.” Halliburton, 514 F.3d at 1249. Claim 9 of the ‘827
16 Patent is therefore invalid as indefinite under 35 U.S.C., ¶ 2. Id. Accordingly, the
17 court grants SS/L’s motion for invalidity of Claim 9 of the ‘827 Patent.

18 **III. Non-Infringement**

19 SS/L argues in the alternative that SS/L’s product, the Jupiter-1 satellite, has not
20 infringed Claims 7, 8, or 9 of the ‘827 Patent based on a literal reading of the claims.
21 However, SS/L’s non-infringement arguments are based on the same contentions
22 regarding Claims 7 and 8 as their indefiniteness arguments, and therefore fail to
23 demonstrate non-infringement.

24 SS/L’s argument regarding Claim 7 is based on its interpretation of “a transmitter
25 configured to transmit in one of the GSO frequency band and in the NGSO frequency
26 spectrum” to require transmissions in either the downlink GSO spectrum or the NGSO-
27 frequency spectrum, rather than the extended frequency spectrum including GSO and
28 NGSO bands. SS/L contends that Jupiter-1 is not configured to operate in an NGSO-

1 only mode. However, the Court construes “a transmitter configured to transmit in one
2 of the GSO frequency band and in the NGSO frequency spectrum” in Claim 7 as “in
3 one or more of the GSO frequency band and the NGSO frequency spectrum.” SS/L
4 admits that the Jupiter-1 is accused of being configured to operate in either the GSO
5 or extended frequency spectrum, potentially infringing Claim 7 of the ‘827 Patent
6 based on the Court’s construction. (Doc. No. 140 at 23.) As a result, SS/L has not
7 demonstrated non-infringement by clear and convincing evidence.

8 Likewise, SS/L’s argument regarding Claim 8 is contradicted by the Court’s
9 interpretation of the claim. SS/L admits that the Jupiter-1 is accused of employing a
10 low-noise amplifier that amplifies signals received from ground terminals. (Doc. No.
11 140 at 24.) SS/L contends that the Jupiter-1 is not configured to amplify signals
12 already transmitted from the satellite, as the satellite could not possibly be configured
13 in that fashion. (Id.) Because the courts reads “transmitted signals” in Claim 8 to refer
14 to signals transmitted to the satellite, rather than from the satellite, SS/L has failed to
15 demonstrate non-infringement at this time.

16 Conclusion

17 SS/L has demonstrated that Claim 9 of the ‘827 Patent is invalid as indefinite
18 under 35 U.S.C. § 112. SS/L has failed to demonstrate that Claims 7 and 8 of the ‘827
19 Patent are invalid as indefinite. Additionally, SS/L has failed to demonstrate non-
20 infringement of the asserted claims of the ‘827 Patent by clear and convincing
21 evidence. Accordingly, the court grants SS/L’s motion for summary judgment of
22 invalidity of Claim 9 of the ‘827 Patent, and denies the remainder of the motion.

23 **IT IS SO ORDERED.**

24 DATED: May 29, 2013

25 
26 MARILYN L. HUFF, District Judge
27 UNITED STATES DISTRICT COURT
28