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March 18, 2002

VIA HAND DELIVERY

William F. Caton
Acting Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

**Re: MDS America Inc. Application for Modified Radio Station Under Part 5 of
FCC Rules – Experimental Radio Service, Call Sign WC2XPU,
File No. 0005-EX-ML-2002**

Dear Mr. Caton:

Enclosed for filing please find an original and four copies of Northpoint
Technology Ltd.'s *Petition to Deny* in the above-captioned matter.

I have enclosed an additional copy for date-stamp and return in the self-addressed
envelope provided. Please contact me if you have any questions. Thank you for your
assistance in this matter.

Yours truly,



J.C. Rozendaal

Counsel for Northpoint Technology, Ltd.

enclosures

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
)

MDS America Inc. Application for Modified)
Radio Station Under Part 5 of FCC Rules --)
Experimental Radio Service)
_____)

File No. 0005-EX-ML-2002
Call Sign WC2XPU

To the Chief Engineer, Office of Engineering and Technology:

PETITION TO DENY

Northpoint Technology, Ltd., ("Northpoint") hereby respectfully opposes the application of MDS America Inc. ("MDS") for a modification of the terms of its existing experimental license to operate a terrestrial transmitter in the 12.2-12.7 GHz spectrum. The existing terrestrial license should be revoked for at least three reasons. First, the license was procured based on material misstatements by MDS. Second, MDS is likely not qualified to hold a terrestrial license because it is 71.3% foreign owned. Third, MDS's experimental tests to date indicate strongly that its operations infringe several of Northpoint's patents. The Commission should not aid and abet further infringement of Northpoint's rights by authorizing continued terrestrial operations by what appears to be, at best, a flawed copy of Northpoint's inventions.

Even if the Commission does not revoke the existing license, however, it should decline to modify the terms of the license as requested in MDS's current application. Despite its own protestation to the contrary, MDS has failed to obtain data under its existing license that would suggest that MDS has the ability to operate a terrestrial transmitter without causing harmful interference to DBS operations. At the very least,

the Commission should require that adequate experimental data be collected under the existing terms of the license before authorizing the increased antenna height and liberalized operating parameters that MDS now seeks. For all of these reasons, MDS's pending application should be denied.

I. MDS's Existing Experimental License Should Be Revoked

MDS procured its existing experimental license based in part on representations to the Commission relating to the experience of its parent company MDS International ("MDSI"). In its application, MDS represented to the Commission, among other things, (1) that "MDS International systems identical to this one are already functional in many places around the world where there exist ubiquitous DBS satellite customers,"¹ (2) that "[i]n years of commercial operation MDS International has not faced interference problems with existing DBS systems,"² and (3) that "[a]t the present time, MDS's technology is the only commercially functioning MVDDS system in the world with more than 20 installations worldwide."³ MDS America subsequently admitted that much of the information it provided to the Commission was incorrect and acknowledged that MDSI "does not operate systems itself except for the demonstration site near Lyon."⁴ MDS says this resulted in "details of the operations of a few foreign systems unintentionally

¹ Application of MDS America, Inc., for Radio Station Under Part 5 of FCC Rules – Experimental Radio Service, File No. 0095-EX-PL-2001, Exhibit 2, at 1 (FCC Filed Apr. 20, 2001) ("MDS Application").

² *Id.*

³ *Id.*

⁴ Ex Parte Letter from James W. Olson, Howrey Simon Arnold & White, to Jane Mago, FCC, at 2 n.3, ET Docket 98-206 & MDS Application File No. 0095-EX-PL-2001 (FCC filed May 21, 2001).

being reported incorrectly.”⁵ Based on the information available in the public record, Northpoint has so far been unable to confirm even a single instance in which MDSI or its affiliates has operated a commercial terrestrial system that has shared spectrum with DBS operations in the same geographic location at the same time.

Northpoint pointed out MDS’s misrepresentations in ex parte letters to FCC General Counsel Jane Mago dated May 9, 2001, and June 7, 2001, whereupon Ms. Mago referred the matter to the Enforcement Bureau.⁶ Northpoint understands that the investigation of these misrepresentations was subsequently referred to the Wireless Telecommunications Bureau. Northpoint does not know whether MDS’s misstatements were intentional, but they were clearly material – and they call into serious question MDS’s fitness to be a Commission licensee. The Commission should revoke or suspend MDS’s license until its investigation of these misrepresentations is complete.

Beyond the factual misrepresentations, a further ground to question MDS’s fitness to be a licensee is that MDS is under foreign control. According to lobbying records on file with the U.S. House of Representatives, MDS is at least 71.3% foreign owned. Sheik Ali al-Khalifa al-Sabah, a Kuwaiti national, is believed to own at least 47.5% of MDS; Jean-Claude Ducasse, a French national, is believed to own at least 23.8%, and there is reason to believe that these persons exercise substantial control over MDS. Although the Commission has not yet determined which foreign ownership restrictions it will impose

⁵ *Id.*

⁶ See Ex Parte Letters from Michael K. Kellogg, Kellogg, Huber, Hansen, Todd & Evans, PLLC, to Jane Mago, FCC, ET Docket 98-206, MDS America Application File No. 0095-EX-PL-2001 (FCC filed May 9, 2001 & June 7, 2001); Ex parte Letter from Michael K. Kellogg, Kellogg, Huber, Hansen, Todd & Evans, PLLC, to Norman Goldstein, FCC, ET Docket 98-206, MDS America Application File No. 0095-EX-PL-2001 (FCC filed Jul. 3, 2001).

on terrestrial MVDDS operations in the 12.2-12.7 GHz band, such a high percentage of foreign ownership would render MDS ineligible for a domestic DBS license or broadcast license under current Commission regulations. The same policy considerations animating these foreign ownership restrictions should likewise disqualify MDS from holding an MVDDS license, thus making the current experimental license, at best, superfluous.

A further ground for terminating MDS's experimental license is that it has used the license to infringe several of Northpoint's well-documented patents, which carry a presumption of validity under federal law. *See* 35 U.S.C. § 282. Northpoint has already filed a patent infringement suit against MDS based on MDS's infringing experimental tests. In its submissions to the FCC, MDS does not offer any explanation of how its system avoids infringing Northpoint's patents. On the contrary, MDS has erroneously suggested that Northpoint might license its technology to other would-be terrestrial operators.⁷ In fact, Northpoint plans to *provide* Multichannel Video Programming Distribution ("MVPD") service and broadband Internet access through its own affiliates, not license strangers to do so.⁸ Northpoint has declared its intention to enforce its patent rights against all infringers, whether private, quasi-public, or public. The Commission should put a stop to MDS's efforts to involve the Commission in MDS's continued

⁷ *See* Ex parte Letter from Nancy K. Spooner and Tony S. Lee, Swidler Berlin Sheroff Friedman LLP, to Magalie Roman Salas, FCC, ET Docket 98-206 et al., App. A, at 3 (FCC filed Oct. 18, 2001).

⁸ *See* Ex Parte Letter from J.C. Rozendaal, Kellogg, Huber, Hansen, Todd & Evans, PLLC, to Magalie Roman Salas, FCC, ET Docket 98-206 et al. (FCC filed Nov. 2, 2001) ("Northpoint Nov. 2, 2001 Ex Parte"), attached as an exhibit to this Petition.

infringement of Northpoint's patents. For the Commission to ignore Northpoint's patent rights would be arbitrary and capricious and contrary to the public interest.⁹

To sum up, the Commission should revoke MDS's experimental license – and at the very least it should refrain from liberalizing the terms of the existing license – until its investigation of MDS's material misstatements, ownership, and patent infringement is complete.

II. MDS Has Failed To Justify Liberalizing The Terms of Its Experimental License

MDS's current application seeks, among other things, permission to operate on towers six times higher than currently authorized, and to do so in the rain when the DBS operators claim that their signals are most vulnerable to harmful interference. MDS has failed to produce a record that would justify liberalizing the terms of its license in this way. Northpoint is concerned that the DBS operators would cite any interference that MDS's flawed system may cause as evidence in their relentless campaign to stop *all* new terrestrial licensing in the 12.2-12.7 GHz band. Northpoint has been before the Commission for more than eight years and has proven conclusively that it can share the spectrum without causing harmful interference to DBS. Unlike MDS, Northpoint submitted its technology for a successful independent demonstration by the MITRE Corporation, as required by statute.

Instead of submitting any technology for independent testing by the MITRE Corporation under the Commission's aegis last year, MDS sought to purchase a friendlier evaluation by its own contractor in tests conducted under its experimental license. The resulting engineering report, however, utterly fails to substantiate MDS's claim that it

⁹ See *id.* at 6-8.

possesses a terrestrial system capable of sharing spectrum with DBS. Indeed, as detailed in the attached *ex parte* letter from Northpoint dated November 2, 2001, MDS's test report suffered from at least three flaws that render it invalid.

First, MDS did not demonstrate that its equipment was capable of transmitting or receiving video, data, or any other coherent signal – with or without interference. For all the Commission can know, MDS might well have been transmitting nothing but noise.

Second, MDS acknowledges that its data is polluted with unexplained, unquantified anomalies, including an “almost constant bias in received power levels between two observations of DBS signal.”¹⁰ MDS blames this mysterious bias on the weather¹¹ but provides no evidence in support of that assertion and no explanation as to why it did not conduct its test so as to eliminate weather as a factor (for example, by gathering data at the instant of change between the on and off state of the transmitter, so that the weather is the same for both measurements). The result is that, in examining any set of data points in the report, it is impossible to determine whether the data shown reflect the bias or portray an actual change in DBS performance that resulted from MDS's operations.

MDS likewise fails to account for the fact that its carrier signal, which it claims was 27 MHz wide, appears to have impacted the DBS signal over at least 100 MHz of bandwidth.¹² Until these anomalies in the data are both explained and quantified, the MDS report is useless.

¹⁰ See LCC Engineering Report (attached as exhibit to current application for modification of experimental license terms), at 15.

¹¹ *Id.*

¹² See Northpoint Nov. 2, 2001 *Ex Parte* at 5 & n. 7.

Third, even if one were to ignore the admitted bias in and other problems with MDS's data, the report would still be useless because it fails to provide any quantitative analysis of the material submitted or any estimate of the levels of MDS interference present or its impact on DBS. MDS has not revealed the equivalent power flux density ("epfd") of its signal or the actual carrier-to-interference ratio ("C/I"). Nor has MDS estimated the increase in unavailability of DBS reception caused by its operations. In short, MDS has provided no information regarding any of the criteria the Commission is considering using to evaluate satellite-terrestrial sharing in the 12.2-12.7 GHz band. Accordingly, the report fails to provide any data relevant to the decision whether MDS might be capable of sharing the spectrum with DBS. Indeed, MDS's claim to have a "mitigation zone" around its transmitter as small as 100 meters is quite literally meaningless, since MDS nowhere explains what it means by a "mitigation zone."

Now, based on a test report that is manifestly invalid, MDS seeks to raise its antenna height to more than six times what is currently allowed and to operate in the rain. Yet the DBS lobby has always claimed that DBS signals are most susceptible to harmful interference in rainy conditions. Because any harmful interference that MDS might cause would likely be used as an argument against allowing any terrestrial wireless competition to DBS and cable in the 12.2-12.7 GHz band, Northpoint urges the Commission to proceed with caution. Given MDS's failure to come forward with usable information under the terms of its existing license, the Commission should decline even to consider the modifications MDS now seeks.

Conclusion

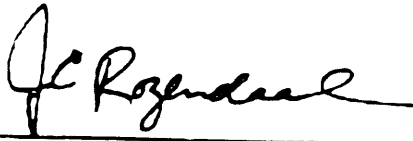
For the foregoing reasons, MDS's application for a modification of its experimental license should be denied and the license should be revoked.

March 18, 2001

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Respectfully submitted,
NORTHPOINT TECHNOLOGY, LTD.

By:



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November 2, 2001

VIA HAND DELIVERY**RECEIVED EX PARTE**

Ms. Magalie Roman Salas
 Secretary
 Federal Communications Commission
 445 12th Street, S.W.
 Washington, D.C. 20554

NOV - 2 2001

FEDERAL COMMUNICATIONS COMMISSION
 OFFICE OF THE SECRETARY

Re: Ex Parte Communication in ET Docket No. 98-206; RM-9147; RM-9245; Applications of Broadwave USA et al., PDC Broadband Corporation, and Satellite Receivers, Ltd., to provide a fixed service in the 12.2-12.7 GHz Band; Requests of Broadwave USA et al. (DA 99-494), PDC Broadband Corporation (DA 00-1841), and Satellite Receivers, Ltd. (DA 00-2134) for Waiver of Part 101 Rules.

Dear Ms. Salas:

I write on behalf of Northpoint Technology, Ltd. ("Northpoint") in response to two recent ex parte submissions by MDS America, Inc. ("MDS") relating to the licensing of terrestrial services in the 12.2-12.7 GHz frequency band.¹

Northpoint has invented, patented, and successfully demonstrated to the Commission terrestrial service technology that can share the 12.2-12.7 GHz band with existing and planned satellite users. No one else has come forward with any competing technology that does not infringe Northpoint's patents.

MDS is a late arrival in these proceedings – much too late. MDS has neither filed an application to provide terrestrial service in the 12 GHz band nor committed to filing an application should the Commission decide to accept further applications. MDS has also completely failed to provide any technology for independent demonstration in the

¹ Ex parte letter from Nancy K. Spooner and Tony S. Lee, Swidler Berlin Shereff Friedman LLP, to Magalie Roman Salas, Secretary, Federal Communications Commission, ET Docket 98-206 et al. (FCC filed October 18, 2001) ("MDS Oct. 18 Ex Parte"). Ex parte letter from Nancy Killien Spooner, Swidler Berlin Shereff Friedman LLP, to Magalie Roman Salas, Secretary, Federal Communications Commission, ET Docket 98-206 et al. (FCC filed Oct. 17, 2001) ("MDS Oct. 17 Ex Parte").

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Commission-sponsored MITRE testing program – a testing program expressly mandated by Congress.

In a prior submission, MDS persuaded the Commission to grant it an experimental license by submitting a false description of MDS's deployment record. MDS now follows up with an "engineering report" submitted by MDS contractor LLC International. Based on the data presented, the very best that can be said of MDS is that they may have a flawed imitation of Northpoint's technology. (To underscore that point MDS asks the Commission, in an accompanying submission, either to ignore Northpoint's patents or assume that they are invalid.) In fact, however, MDS cannot even copy our technology competently.

As detailed more fully below, Northpoint has identified four fatal flaws in the MDS operations and report:

- 1) MDS did not document transmission or reception of video, data or any coherent signal in its experimental operations.
- 2) LCC acknowledges that its measurements of MDS transmissions resulted in an "almost constant bias in received power levels between two observations of DBS signal." The report attempts, incredibly, to attribute this bias to "changes in the weather" during the testing that were highly correlated with the MDS transmitter's on or off condition.
- 3) Unable to eliminate or quantify this bias, LLC was not able to provide any quantitative estimate of the impact the MDS transmissions had on DBS in terms of the interference criteria under consideration of the Commission.
- 4) It appears that MDS transmitters or test equipment was malfunctioning, since what is supposed to be a 27-MHz-wide MDS signal appears to impact DBS across 100 MHz of bandwidth.

We detail these flaws in the body of this letter. We also respond to MDS's baseless suggestion that the Commission has authority to override or otherwise disregard Northpoint's duly issued patents. Northpoint will not, and cannot be forced to, license its technology to anyone other than its chosen affiliates. Finally, Northpoint responds to MDS's contentions that the Commission may conduct an auction that is expressly forbidden by the ORBIT Act and that MDS's "belief" that mutually exclusive applications will eventually be filed, despite the passage of a number of relevant deadlines, forms an adequate basis for continuing to deny Northpoint a license.

The Commission should summarily reject the latest submissions from MDS and grant Northpoint's pending license applications without further delay.

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I. MDS's Field Tests Suggest That It Has, At Best, a Flawed Imitation of Northpoint's Technology

MDS is a latecomer to these proceedings that seeks to free-ride on Northpoint's successful demonstration of the viability of terrestrial/satellite sharing in the 12.2-12.7 GHz band. Declining to expose its offering to the harsh scrutiny of Congressionally mandated independent technical demonstrations conducted by MITRE, MDS apparently sought to purchase a friendlier evaluation by its own contactor, LCC International. LLC's report, however, fails to substantiate MDS's claim that it possesses a terrestrial system capable of sharing with DBS. The most that can be said is that MDS may have a flawed imitation of Northpoint's technology; despite its evident violation of Northpoint's patents, technical flaws with the test procedures and data taking prevent any conclusions concerning the actual workings of MDS's system from being drawn with certainty.

The MDS test report can best be summarized with four essential points:

- MDS did not demonstrate transmission or reception of a video, data or any other coherent signal with or without interference.
- MDS data is invalidated by an acknowledged "almost constant bias" factor that it blames on weather changes that correlated with its transmitter state.
- The MDS 27 MHz-wide signal appears to impact DBS across a 100 MHz bandwidth.
- No quantitative estimate of MDS impact on DBS is presented.

MDS Did Not Demonstrate That Its Equipment Was Capable of Transmitting or Receiving Video, Data or Any Other Coherent Signal With or Without Interference

The most obvious deficiency of the MDS experiment is that MDS did not demonstrate that its system could transmit data or video signals with or without interference to DBS. It is striking that at no point does the report describe a data link or even give a hypothetical link budget for the service MDS claims it can provide to the public. Some might believe that this omission can be easily corrected at a later point because many equipment providers have modulation and encoding equipment for digital broadcasting. But the success of others can not be attributed to MDS. MDS has not suggested that it will use other manufacturers' equipment. To the contrary, it has held itself out as complete solution providing both hardware and transmission protocols² of its own design.

As Northpoint has documented in prior filings, MDS has provided no evidence that it has a single operational system anywhere in the world that shares spectrum with DBS. All the MDS equipment that is in operation today appears to be used in traditional

² MDS has stated that the use of a proprietary transmission protocol it calls "LD-QPSK" is an essential part of its proposed system. See Comments of MDS America, Inc., at 8, ET Docket 98-206 (FCC filed Mar. 12, 2001).

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terrestrial-only microwave applications such as wireless cable or point-to-point service. While MDS does not explain why it did not demonstrate transmission or reception of a coherent signal, it seems likely that MDS was unable to establish a data link at its Clewiston location. Successful satellite-terrestrial sharing requires operation at much lower power than is used by typical microwave equipment and it is very possible that MDS equipment was simply unsuited to this task.

LCC Acknowledges its Data Contains Unexplained Anomalies

LCC acknowledges that its measurements resulted in an "almost constant bias in received power levels between two observations of DBS signal."³ The report then goes on and incredibly attempts to attribute this bias to "changes in the weather" during the testing that were correlated with the MDS transmitter state.⁴ MDS has made many astonishing assertions during its brief period before the FCC; this, however, is a whopper even by MDS standards.

MDS never attempts to quantify the bias LLC documented, and it provides no support for the proposition that the difference was weather related. The Commission should note that there is no finding of such an "almost constant bias" in any of the other terrestrial-satellite sharing test reports presented to the Commission by Northpoint, MITRE, or DBS.⁵

A more likely explanation of the bias found is the presence of one or more variables in the MDS test set up that MDS did not understand, or perhaps did not reveal to its contractor. The bias identified by LLC appears to have been considerably greater than any interference criteria under consideration by the Commission. It should be clear that data from any experiment that contains a substantial un-quantified and unexplained bias is unreliable. In examining any plot or data point in the LLC report, it is impossible to determine if the data shown reflects the bias or portrays the actual delta in DBS performance that resulted from MDS operations.

Unless this bias is explained and quantified, LCC's report must be considered invalid. Blaming it on the weather is not sufficient.

³ MDS Oct 17 Ex Parte, attachment (Clewiston Report at 15).

⁴ *Id.* ("A close examination of the weather conditions suggests a very close correlation between the change in weather conditions and the presence of this shift in received power levels. It is believed that this difference in received power levels is due to change in weather conditions between, and even during, the two DBS signal observations.").

⁵ While Northpoint doubts that weather caused the anomalies in the LCC data, it should be noted that experimental designs exist that can completely eliminate weather as a factor. Northpoint's testing methodology, for example, gathered data at the instant of change between the on and off state of the Northpoint transmitter. Northpoint also gathered bit error rate data to quantify the exact impact at the instant of change. By contrast, the LLC data gathering method destroyed the instant of change information, leaving more questions than answers and in its results. Once LLC realized that its data suffered from bias, it should have stopped data collection imposed basic controls that would have eliminated this bias.

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Lacks Basic Data Essential for Commission Analysis

Perhaps recognizing that it lacked reliable data, LCC does not provide *any* quantitative analysis of the material submitted or any estimate whatsoever of levels of MDS interference present or its impact on DBS. Because MDS fails to relate its data to any of the proposed metrics for measuring interference, the Commission cannot know how MDS rates on the scales the Commission plans to use to judge an applicant's fitness.

Critical Factors Not Presented By MDS:

- Equivalent power flux density ("e.p.f.d.") of its signal
- Actual carrier-to-interference ratio ("C/I")
- Estimate of the increase in unavailability of DBS reception

These omissions are fatal flaws in the report. MDS did not present a single link budget, either for its own system or for any DBS system that it measured. It is not possible to make a determination of compatibility in the absence of a well-defined system analysis. Without this most basic information, the Clewiston Report can provide no data relevant to the Commission's decisionmaking in ET Docket 98-206.

A prime example of the report's lack of quantitative information is MDS's claim to have a "mitigation zone around its transmitter as small as 100 meters."⁶ This statement is quite literally meaningless because MDS nowhere explains what it means by a "mitigation zone." No quantitative definition of the mitigation area is presented, much less defended – a surprising omission considering that the definition of a mitigation zone is one of the areas of greatest concern to the Commission.

Why Did a 27-Mhz Wide Signal Replicate Itself Across a 100-Mhz Band? Another Mysterious Result from MDS's Operations

On page 9 of its report MDS claims its carrier was 27 MHz wide⁷ yet it is apparent from the report data that the MDS signal impacted the DBS system across at least 100 MHz bandwidth. For example, in Figure 7 on page 26, the data shows a saw-tooth pattern replicated over 100 MHz – the full frame shown in the plot. Such a saw-tooth pattern is not a "constant bias," as it clearly replicates the shape of the MDS carrier. MDS makes no effort to explain this anomaly, although a likely explanation is equipment malfunction in either the transmission or test equipment.

⁶ MDS Oct 17 Ex Parte, attachment (talking points).

⁷ Transmission at this bandwidth represented a violation of the MDS experimental license which specified transmissions at 39 MHz. Any changes to the experimental operations were required to be filed in advance of implementation. See 47 C.F.R. § 5.77; MDS Experimental Radio Station Construction Permit and License, File No. 0095-EX-PL-2001 (May 21, 2001). There is no evidence to that MDS provided the required notification.

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MDS Is No Northpoint

Northpoint itself observed the MDS operations in Florida and took its own data to assess the extent of the MDS imitation of Northpoint. As is discussed below, Northpoint has sued MDS for patent infringement as a result of MDS's testing and development activities. The Commission should not, however, interpret Northpoint's lawsuit as a left-handed endorsement of the MDS technical system. While Northpoint believes that MDS used enough of Northpoint's intellectual property to be liable for infringement, it is also clear that MDS's implementation was highly flawed.

The Commission must not assume that results generated from MDS activity are representative of Northpoint's technology. MDS lacks critical knowledge in terrestrial-satellite sharing that make the system it has proposed wholly unsuited for deployment in the 12.2-12.7 GHz band.

As MITRE noted in its general observations on generic MVDDS sharing, the MVDDS service presents a "significant interference threat" to DBS. MITRE specifically tested Northpoint's MVDDS implementation and found that Northpoint's mitigation technology was effective. The Commission should not assume that all MVDDS implementations will be equally successful. The Clewiston Report demonstrates that they are not.

II. MDS, an Infringer of Northpoint's Patents, Incorrectly Argues that the Commission Can Disregard Northpoint's Patent Portfolio

MDS does not claim to have any patents covering its purported technology. In stark contrast, Northpoint has already documented that it holds multiple patents on systems for providing terrestrial service without causing harmful interference to satellite systems operating on the same frequencies.

Responding to the recent tests conducted by MDS in Clewiston, Florida, and MDS's proposal to deploy a terrestrial broadcast system, Northpoint sued MDS for patent infringement. In its submissions to the FCC, MDS does not explain how its system avoids infringing the Northpoint patents, or even squarely deny that the system MDS tested in Florida and proposes to deploy in this country infringes Northpoint's patents. Rather, MDS merely states that it has asked the court in the litigation between Northpoint and MDS to declare that MDS does not infringe and that Northpoint's patents are invalid.⁸ Such an unsupported position is a thin reed on which to base an entire auction cycle.

⁸ MDS gives impression that it initiated the litigation with Northpoint, but it was the other way around. When MDS conducted the Clewiston tests that are the subject of the report MDS submitted to the Commission, Northpoint sued MDS for infringement and the threatened future infringement of Northpoint's patents, including the '878 and '634 patents. These patents were brought to the Commission's attention in Mr. Hanley's letter to General Counsel Jane Mago of September 17, 2001. MDS served an

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Despite MDS's invitation, the Commission cannot ignore Northpoint's patents. By statute (35 U.S.C. § 282), Northpoint's patents are *presumed* valid. The presumption of validity "is based in part on the expertise of patent examiners presumed to have done their job" and "may be viewed as a presumption of administrative correctness." *Brookaree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1574 (Fed. Cir. 1992).⁹ In keeping with this statutory presumption, then, the Commission must itself presume the validity of Northpoint's patents.

MDS's argument that the U. S. Government will not be liable for inducement of infringement or contributory infringement if the Commission adopts rules that mandate that a terrestrial licensee (other than Northpoint) use Northpoint's patented technology is beside the point. The point is that requiring a licensee to violate the patent laws in order to comply with the Commission's rules is not an insignificant matter. Northpoint's patent rights are rooted in the Constitution of the United States. To disregard them would constitute an abuse of the Commission's discretion – it certainly could not be considered in the public interest.

MDS tries to persuade the Commission that, in any event, Northpoint's patent portfolio will not have any impact because, if it loses in the auction, Northpoint will license its technology to others. Thus, according to MDS, "the market for MVDDS would not be hindered in its development in any way because Northpoint can license its technology to service providers and manufacturers of transmitter equipment."¹⁰ MDS even claims that "Northpoint has already announced its plans to widely license its technology."¹¹

MDS is badly mistaken. Northpoint has no intent to "widely" license its patented technology. Northpoint has allied itself with a carefully selected group of business

Answer in the litigation pleading the typical boilerplate defenses that it had not infringed and that the patents are invalid.

⁹ The issue of patent validity is not an issue before the Commission. Nevertheless, given the accusations made by MDS, Northpoint wants to briefly respond in order to dispel any concern that the Commission may have about the viability of the patents. MDS has a heavy burden of proving in patent litigation that the patents are invalid by clear and convincing evidence. In point of fact, MDS has not yet identified any evidence that raises the slightest question as to the validity of Northpoint's patents, much less provide clear and convincing evidence of invalidity. MDS's assertion that claim 18 of the '878 patent is invalid because it encompasses "existing microwave service which operates in the DBS frequency range and has been in existence in the U.S. for many years prior to the filing date of Northpoint's patents" is unsupported and erroneous. Claim 18 requires, among other things, that a terrestrial transmitter simultaneously transmit signals on a common frequency with satellite signals to a user location at which the satellite signals are received. While terrestrial fixed point-to-point microwave service does exist in the DBS band, the FCC long ago determined that DBS service and fixed terrestrial service could *not* co-exist within the same geographic area when operating on the same or adjacent frequencies. See *In the Matter of Inquiry into the Development of Regulatory Policy in Regard to Direct Broadcast Satellites for the Period Following the 1983 Regional Administrative Radio Conference*, Docket No. 80-603, 86 FCC 2d 719, 730 & n.22 (April 21, 1981).

¹⁰ MDS Oct. 18 Ex Parte, App. A, at 3.

¹¹ *Id.*

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affiliates. Northpoint's business plan is to *provide* terrestrial Multichannel Video Program Distribution and broadband Internet access through its own affiliates, not to license strangers to do so. Northpoint fully intends to pursue a business strategy of enforcing its patent rights against all infringers, whether private, quasi-public, or public.

Although Northpoint granted the Commission a carefully limited, royalty-free license to permit MITRE to carry out its independent technical demonstration of Northpoint's technology earlier this year, Northpoint will not grant any further licenses for MITRE, and certainly not for any testing of the MDS system. It is thus ridiculous for MDS to declare that patent issues are "Not [an] FCC Concern."¹² By seeking to open a filing window for further applications that would be subject to the demonstration requirements of the LOCAL TV Act, MDS is attempting to drag the FCC into its own infringement of Northpoint's patents.

As the Commission has been repeatedly reminded, most recently in connection with the Nextwave debacle, the Commission operates within a matrix of other federal laws, including bankruptcy laws, patent laws, and of course the Takings Clause of the Fifth Amendment. The Commission's discretion in the issuance of licenses is not circumscribed by "communications" laws alone. Accordingly, the Commission cannot proceed as if the patent laws simply do not exist, or the Commission is not required to pay them any heed. Any auction grounded on such premises can lead only to years of wasteful delay, and a blanket denial of service to the public.

III. The ORBIT Act Prohibits Auctions of the 12.2-12.7 GHz Band

As Northpoint has explained in previous filings,¹³ the ORBIT Act forbids the auction of "spectrum used for the provision of international or global satellite communications services."¹⁴ MDS does not dispute that the 12.2-12.7 GHz band is spectrum used "for the provision of international or global satellite communications services." As the recent decision of the D.C. Circuit in *National Public Radio v. FCC* ("*NPR*")¹⁵ makes clear, moreover, this prohibition means exactly what it says: it covers the *spectrum* itself, and extends to *all* licensees in that band; the Commission may not narrow the prohibition by redefining the word "spectrum" to read "particular classes of licensees." The ORBIT Act's prohibition on auctions expressly and unambiguously addresses to the part of the spectrum in which a station will operate, and *not* the physical location of the station's transmitters. The Commission can neither evade the plain language of the Act nor sidestep the unambiguous holding of *NPR*.

¹² MDS Oct 17 Ex Parte, attachment (talking points).

¹³ See Comments of Northpoint Technology, Ltd. and Broadwave USA, Inc., ET Docket 98-206, at 14-16 (FCC filed Mar. 12, 2001); see also Ex parte letter from J.C. Rozendaal, Kellogg Huber Hansen Todd & Evans PLLC, to Magalie Roman Salas, Secretary, Federal Communications Commission, ET Docket 98-206 et al., at 1-2 (FCC filed Sept. 19, 2001).

¹⁴ ORBIT Act, Section 647, codified at 47 U.S.C. § 765f.

¹⁵ 354 F.2d 226 (D.C. Cir. 2001).

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MDS argues that “[n]o assignment of orbital locations are [sic] required to license proposed terrestrial stations.”¹⁶ But the Orbit Act forbids auction of the *spectrum* itself, not just the orbital locations. MDS also quotes at length from the legislative history of a bill considered – but never enacted into law – some two years before the Orbit Act was passed. Even if it were relevant, the House Committee Report that MDS quotes, like the ORBIT Act passed two years later, examines the problems that “auctions of *spectrum* or orbital locations” could cause, and – once again – refers to the *spectrum* itself, not to the physical location of any particular station’s transmitters.

MDS goes on to argue that *NPR* only analyzed section 309(j)(2) of the Communications Act and thus does not speak to the ORBIT Act. But *NPR* – decided just three months ago – establishes two straightforward principles of statutory construction: (i) restrictions on the Commission’s auction authority should be construed strictly in accordance with their plain meaning, and (ii) such restrictions can address either the character of the eventual licensee, or the part of the spectrum in which the licensee will operate, and will be enforced accordingly. Contrary to MDS’s suggestion,¹⁷ the ORBIT Act does not prohibit auctioning any kind of “station” or “license” or “service.” Instead, the Act prohibits auctioning specific portions of “spectrum.” And the 12.2-12.7 GHz band is one of those portions.

IV. The Commission Has No Basis To Conclude That MDS Can File Any Bona Fide Application That Will Create The Mutual Exclusivity Needed To Justify An Auction

MDS informs the Commission that MDS “believes that there will be mutually exclusive applications that will require an auction.”¹⁸ Believes on what grounds? MDS has not filed any application to provide terrestrial service in the 12.2-12.7 GHz band. MDS has not even committed to filing such an application in the future. The only thing that MDS’s “belief” establishes here is that there is no mutual exclusive application before the Commission *today*. And today, Northpoint reminds the Commission, is six years after Northpoint first sought an experimental license to showcase its technology;¹⁹ three years after the Commission began rulemaking proceedings to authorize terrestrial uses of the 12.2-12.7 GHz band;²⁰ nearly a year after deadline in the Rural Local Broadcast Signal Act for the Commission issue licenses;²¹ some eight months after the deadline for the completion of MITRE testing established by the LOCAL TV Act;²² and

¹⁶ MDS Oct. 18 Ex Parte at 2.

¹⁷ *Id.* at 4.

¹⁸ *Id.* at 2.

¹⁹ Diversified Communication Engineering, Inc., Application for New or Modified Radio Station Authorization under Part 5 of FCC Rules, File No. 5020-EX-PL-95 (FCC filed Oct. 24, 1995).

²⁰ Notice of Proposed Rulemaking, ET Docket No. 98-206, 14 FCC Rcd 11131 (1998).

²¹ Rural Local Broadcast Signal Act, Pub. L. No. 106-113, §2002(a), 113 Stat. 1501, 1501A-544 (1999).

²² LOCAL TV Act § 1012, 114 Stat. 2762, 2762A-128, 2762A-141 (2000).

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just two months before the onset of DBS's must-carry obligations,²³ which will create a bandwidth squeeze that Northpoint's technology could easily solve.

It is doubtful that MDS could even apply for a license on its own behalf. According to lobbying records on file with the U.S. House of Representatives, MDS is at least 71.3% foreign owned, thus rendering it ineligible for a broadcast license under Section 310(b) of the Communications Act. Although the Commission has not yet determined which foreign ownership restrictions to impose on MVDDS, MDS would clearly be ineligible for a DBS license under current Commission regulations. See 47 C.F.R. § 100.11. The same policy considerations animating the DBS restrictions should likewise disqualify MDS from holding an MVDDS license. Also, Sheik Ali al-Khalifa al-Sabah owns 47.5% of MDS and there is reason to believe that he exercises substantial control over MDS. On May 21 of this year, the Associated Press reported that Sheik Ali, who is a former Oil Minister and Finance Minister of Kuwait and a member of the Kuwaiti royal family, is the subject of at least two separate investigations for embezzlement and financial wrongdoing.²⁴

Beyond this, MDS has given the Commission no reason to believe that it is technically qualified to provide non-interfering service in the 12.2-12.7 GHz band; to the contrary, it has given the Commission every reason to believe that it is not. MDS's belated entry into these long proceedings has been marked by a series of grand, vague, utterly unsubstantiated claims about the deployment and capabilities of its completely hypothetical supposed technology. MDS filings have been littered with material misstatements and outright falsehoods, and have been referred by the Commission's General Counsel to the Enforcement Bureau.²⁵

MDS is procedurally unqualified as well. MDS missed the filing window created by the *Ku Band Cut-Off Notice*.²⁶ As Northpoint has explained in previous filings,²⁷ this proceeding has pivoted on the *sharing* of spectrum in the 12 GHz band with DBS and the

²³ Satellite Home Viewer Improvement Act § 1008(a), codified at 47 U.S.C. § 338 (a)(1); see generally Report and Order, *Implementation of the Satellite Home Viewer Improvement Act of 1999: Broadcast Signal Carriage Issues; Retransmission Consent Issues*, CS Docket Nos. 00-96 & 99-363, FCC 00-417 (rel. Nov. 30, 2000).

²⁴ See D. Elias, *Kuwaiti Cabinet files new embezzlement complaints against member of ruling family*, Associated Press Worldstream (May 21, 2001).

²⁵ See Ex parte letter from Michael K. Kellogg to Jane Mago, General Counsel, Federal Communications Commission, ET Docket 98-206 et al. (FCC filed May 9, 2001); Ex parte letter from Michael K. Kellogg to Jane Mago, General Counsel, Federal Communications Commission, ET Docket 98-206 (FCC filed June 7, 2001); Ex parte letter from Michael K. Kellogg to Norman Goldstein, Enforcement Bureau, Federal Communications Commission, ET Docket 98-206 et al. (FCC filed July 3, 2001).

²⁶ Public Notice, *Cut-off Established for Additional Applications and Letters of Intent in the 12.75-13.25 GHz, 13.75-14.5 GHz, 17.3-17.8 GHz and 10.7-12.7 GHz Frequency Bands*, Report No. SPB-141, 1998 WL 758449 (rel. Nov. 2, 1998).

²⁷ See, e.g., Comments of Northpoint Technology Ltd. and Broadwave USA, Inc., at 17-18, ET Docket 98-206 (FCC filed Mar. 12, 2001); Motion to Dismiss by Northpoint Technology, Ltd. and Broadwave USA, Inc., at 7-16, *Application of PDC Broadband Corporation to Provide Terrestrial Services in the 12.2-12.7 GHz Band* (FCC filed May 23, 2000).

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NGSO FSS operators. For that reason, the filing cut-off was January 8, 1999, in time to stake a claim together with the NGSO FSS operators, who otherwise would have planned their services in such a manner as to leave no room at all for terrestrial sharing. Only Northpoint filed in time. It was Northpoint's filing – and Northpoint's alone – that impelled the Commission to promulgate sharing criteria. It was Northpoint's filing – and Northpoint's alone – that impelled Congress to set in motion a technology-testing process and deadline. It was Northpoint's proper participation in that testing process – and Northpoint's alone – that permitted MITRE to report to the Commission that sharing was technologically feasible. MDS says that the *Ku Band Cut-Off Notice* was insufficiently precise. But the terrestrial and satellite halves of these proceedings have been intertwined legally, procedurally, and practically since their inception. MDS did not just miss the filing date by a few months or a year or two. MDS *still* has not submitted any application, although it has known about these ongoing proceedings for years.

Congress itself passed the LOCAL TV Act to establish a deadline for testing the technology²⁸ precisely *because* the terrestrial and satellite halves of these proceedings are so closely intertwined. Was the simple cut-off notice in that two-paragraph Act insufficiently precise, too? MDS argues that because no applications have been accepted for filing, “no entity need demonstrate its technical capabilities at this time.”²⁹ “Applicant,” in other words, is to mean something other than an entity that has applied for a license. Congress knew when it passed the LOCAL TV Act that three applications to provide terrestrial service in the 12.2-12.7 GHz band had been submitted to the Commission, and that the Commission had sought comment on whether formally to accept them for filing. Congress nevertheless established a clear, strict deadline for carrying out the independent technical demonstrations of the technologies proposed by those with “pending” applications. As the Commission itself clearly understood, Congress plainly wanted the demonstrations conducted forthwith – that is why the Commission immediately contracted with MITRE to conduct the testing in an accelerated effort to comply with the short statutory deadline. MDS didn't even file an application then. Nor did it participate in the MITRE testing.

This letter will be filed electronically in ET Docket 98-206, RM-9147, and RM-9245. In addition, twelve copies of this letter will be filed in paper form – two for inclusion in each of the above-referenced application files. Please contact me if you have any questions.

Yours sincerely,



J.C. Rozendaal
Counsel for Northpoint
Technology, Ltd.

²⁸ Pub. L. No. 106-553, App. B., Tit. X, 114 Stat. 2762, 2762A-128 (Dec. 21, 2000).

²⁹ MDS Oct. 18 Ex Parte at 5.

CERTIFICATE OF SERVICE

I, Shonn Dyer, hereby certify that on this 18th day of March, 2002, copies of the foregoing were served by hand delivery* and/or first class United States mail, postage prepaid, on the following:

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