

BEFORE THE  
Federal Communications Commission  
WASHINGTON, D.C.

|                                     |   |                     |
|-------------------------------------|---|---------------------|
| In the Matter of                    | ) |                     |
| Requests for Waiver of              | ) | CS Docket No. 97-80 |
| 47 C.F.R. § 76.1204(a)(1)           | ) |                     |
|                                     | ) |                     |
| Great Plains Cable Television, Inc. | ) | CSR-7212-Z          |
| Volcano Vision, Inc.                | ) | CSR-7214-Z          |
| James Cable, LLC                    | ) | CSR-7216-Z          |

**COMMENTS OF MOTOROLA, INC.**

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June 14, 2007

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**COMMENTS OF MOTOROLA, INC.**

Motorola, Inc. (“Motorola”) hereby submits these comments in response to the Media Bureau’s Public Notice in the above-captioned proceedings.<sup>1</sup> Great Plains Cable, James Cable, and Volcano Vision have filed separate requests for waiver of the Commission’s integration ban rule for set-top boxes manufactured by Motorola (“Waiver Requests”).<sup>2</sup> Motorola strongly supports these Waiver Requests and urges the Commission to give prompt approval to these time-limited requests for the reasons set forth below and those identified in the Waiver Requests.

The Waiver Requests primarily cover limited-capability set-top boxes that have been or continue to be manufactured by Motorola, including: (1) the DCT-700; (2) the DCT-1000;

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<sup>1</sup> See Public Notice, Special Relief and Show Cause Petitions, Report No. 0211 (May 25, 2007).

<sup>2</sup> See *In the Matter of Great Plains Cable Television, Inc.’s Request for Waiver of 47 C.F.R. § 76.1204(a)(1)*, CSR-7212-Z, CS Dkt. No. 97-80 (May 9, 2007) (“Great Plains Waiver”) (requesting a time-limited waiver for DCT-1000, DCT-2000, and DSR-410 set-top boxes); *In the Matter of Volcano Vision, Inc.’s Request for Waiver of 47 C.F.R. § 76.1204(a)(1)*, CSR-7214-Z, CS Dkt. No. 97-80 (May 3, 2007) (“Volcano Waiver”) (requesting waiver for DCT-700, DCT-2000, DCT-2500, DCT-3412, DCT-6200, and DCT-6412 until 2008); *In the Matter of James Cable, LLC’s Request for Waiver of 47 C.F.R. § 76.1204(a)(1)*, CSR-7216-Z, CS Dkt. No. 97-80 (May 11, 2007) (“James Cable Waiver”) (requesting waiver for all digital boxes or, in the alternative, for the DCT-700, DCT-2500, DSR-410, and DSR-470, through at least December 31, 2009).

(3) the DCT-2000; (4) the DCT-2500; (5) the DSR-410; and (6) the DSR-470. As detailed in these Waiver Requests:

- The DCT-700 includes a single digital tuner, an RF output and a composite video output, and right and left audio channel outputs.<sup>3</sup>
- The DCT-1000, DCT-2000, and DCT-2500 include this basic functionality plus an analog tuner.<sup>4</sup> Motorola no longer manufactures the DCT-1000 and DCT-2000, but continues to manufacture the DCT-2500.<sup>5</sup>
- The DSR-410 is a specialized box deployed in HITS<sup>2</sup>HOME systems that includes digital and analog tuners and simple outputs.<sup>6</sup> The DSR-470 is a specialized box deployed in Quick Take systems that includes digital and analog tuners and simple outputs.<sup>7</sup> Motorola no longer manufactures the DSR-410 and DSR-470.<sup>8</sup>

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<sup>3</sup> See, e.g., James Cable Waiver at Ex. 2 (detailing capabilities of DCT-700).

<sup>4</sup> See, e.g., Great Plains Waiver at Ex. 1 (detailing capabilities of DCT-1000 and DCT-2000); James Waiver at Ex. 2 (detailing capabilities of DCT-2500). Great Plains indicates that it is using the DCT-1000 and DCT-2000 in systems that utilize the HITS Classic service. See Great Plains at 4. HITS Classic is a service offered by Comcast Media Center for distributing digital programming, via satellite, to cable headends around the country. That digital programming can then be delivered, via one-way or two-way cable systems, to conventional digital cable set-top boxes in customers' homes. These digital cable set-top boxes (including the DCT-1000 and DCT-2000) have two-way capability, but, as Great Plains notes (at 4), can also be used in one-way systems. One-way or two-way cable systems that utilize the HITS Classic service can support CableCARD-enabled devices.

<sup>5</sup> To the extent petitioners wish to deploy previously used or refurbished DCT series boxes, such an approach would be consistent with Commission rules and precedent. See *In the Matter of Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, Order on Reconsideration, 14 FCC Rcd. 7596 ¶ 35 (1999) (stating that integration ban rule is not "intended to render equipment obsolete that has already been manufactured and deployed and still has a useful life"); see also *Adams Cable Equipment Ex Parte*, filed in CS Dkt. No. 97-80, at 3 (Apr. 18, 2007) (detailing Commission precedent regarding the treatment of refurbished equipment). Thus, with respect to any DCT series boxes referenced in these Waiver Requests that have been placed in service prior to July 1, 2007, no waiver is needed.

<sup>6</sup> See Great Plains Waiver at Ex. 1 (detailing capabilities of DSR-410). HITS<sup>2</sup>HOME was developed by Motorola and Comcast Media Center as a satellite overlay service for small analog cable systems. HITS<sup>2</sup>HOME allows a cable operator with systems that are too small to take advantage of a traditional digital solution to add 140 or more channels of digital programming without adding headend equipment, engaging in costly rebuilds, or using valuable plant bandwidth. The digital signals are delivered by Comcast Media Center to a satellite dish at customers' homes, and combined with the current analog services supplied by the local cable operator over the cable plant. The DSR-410 is a dual source receiver that integrates the digital satellite signals and the analog cable signals.

<sup>7</sup> See James Cable Waiver at Ex. 2 (detailing capabilities of the DSR-470). Quick Take is another satellite overlay service developed by Motorola and Comcast Media Center for small analog cable systems and other MVPDs to deliver 180 or more channels of digital programming without requiring an expensive system upgrade. Under the Quick Take system architecture, digital signals are delivered by Comcast Media Center to special transcoding equipment at the operator's headend. There, the digital signals are combined with the system's existing analog signals and then delivered via coaxial cable to the DSR-470 in the customer's home. The DSR-470 accepts program signals, authorization, and control commands like a DBS receiver and also includes cable tuning capability.

These devices allow cable customers with analog television sets to access digitally-delivered programming and services (such as pay-per-view programming and an electronic program guide), as well as closed captioning, parental controls, and emergency alert messages. None of these devices supports high-definition (“HD”) programming, digital video recording (“DVR”), Internet access, or other advanced capabilities. These boxes are among the lowest-cost, most limited-capability devices ever built by Motorola for U.S. cable operators.<sup>9</sup>

The DCT-700 is deployed in digital cable systems that simulcast analog channels in digital; hence, this device can rely exclusively on a digital tuner to access programming services carried in those systems. In contrast, the DCT-1000, DCT-2000, and DCT-2500 are typically used in cable systems that have yet to make the conversion to all-digital simulcasting (and will not do so prior to the effective date of the integration ban). Rather, in those systems, programming services are carried in either analog or digital, so the low-cost set-top box must include both an analog and digital tuner to access those services. The DSR-410 and DSR-470 similarly tune analog and digital signals, although, as noted above, the HITS<sup>2</sup>HOME systems (which utilize the DSR-410) and the Quick Take systems (which utilize the DSR-470) differ fundamentally from conventional digital cable systems (*i.e.*, HITS<sup>2</sup>HOME and Quick Take systems are essentially analog systems with a digital satellite overlay).<sup>10</sup>

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(...footnote continued)

<sup>8</sup> Deploying previously used or refurbished DSR-410 or DSR-470 boxes would be consistent with Commission rules and precedent and would not require a waiver. *See supra* note 5.

<sup>9</sup> The Commission expressly invited waiver requests for low-cost, limited-capability set-top boxes in its 2005 Order. *See In the Matter of Implementation of Section 304 of the Telecommunications Act of 1996: Commercial Availability of Navigation Devices*, Second Report & Order, 20 FCC Rcd. 6794 ¶ 37 (2005) (“2005 Integration Ban Order”).

<sup>10</sup> While the DCT-1000, DCT-2000, DCT-2500, DSR-410, and DSR-470 include a digital tuner and an analog tuner, none of these boxes is capable of simultaneously tuning multiple channels of video programming (*i.e.*, for the support of picture-in-picture features), further underscoring their limited capability.

The DCT-700 and the other limited-capability boxes provide an affordable way for millions of cable customers to access a wide array of digital programming and services, and have been popular with cable customers.<sup>11</sup> Waiver petitioners underscore the importance of these boxes to transitioning their customers to digital and migrating their systems to all-digital networks.<sup>12</sup> Relying on the waiver standard articulated in the Bureau's *BendBroadband Waiver Order*,<sup>13</sup> Volcano Vision is seeking a temporary waiver so that it can complete its transition to an all-digital network by 2008.<sup>14</sup> Subsequent to the filing of the Volcano Vision Waiver, the Media Bureau granted two additional waiver requests based on an operator's commitment to go all-digital by or before February 17, 2009.<sup>15</sup> Thus, the Volcano Vision Waiver can and should be granted on this precedent alone.

James Cable and Great Plains base their waivers, in part, on the significant financial difficulties they already face and the additional financial hardship they would confront in

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<sup>11</sup> See, e.g., Motorola Comments, filed in CSR-7109-Z *et al.*, CS Dkt. No. 97-80, at 3 (Mar. 5, 2007) (describing success of DCT-700 and DCT-2500).

<sup>12</sup> See Great Plains Waiver at 7; James Cable Waiver at 9. In its GCI waiver order, the Media Bureau approved a waiver for the DCT-700, DCT-1000, and DCT-2000. See *In the Matter of GCI Cable Inc.'s Request for Waiver of Section 76.1204(a)(1) of the Commission's Rules*, Mem. Opin. & Order, DA 07-2010 ¶ 17 (rel. May 4, 2007) ("*GCI Waiver Order*"). Moreover, in its BendBroadband waiver order, the Media Bureau acknowledged the importance of the DCT-700 to cable's transition efforts. See *In the Matter of BendBroadband's Request for Waiver of Section 76.1204(a)(1) of the Commission's Rules*, Mem. Opin. & Order, 22 FCC Rcd. 209 ¶ 24 (2007) ("*BendBroadband Waiver Order*") (recognizing that conditional grant of a waiver for the DCT-700 would "facilitate BendBroadband's rapid transition to an all-digital network (*i.e.*, by 2008)"); see also *2005 Integration Ban Order* ¶ 37 ("The availability of low-cost boxes will further the cable industry's migration to all-digital networks . . .").

<sup>13</sup> See *BendBroadband Waiver Order* ¶ 24 (granting BendBroadband's waiver request conditioned on BendBroadband going all-digital by 2008).

<sup>14</sup> See Volcano Waiver at 1.

<sup>15</sup> *GCI Waiver Order* ¶ 17 (granting GCI's waiver request conditioned on GCI going all-digital by February 17, 2009); *In the Matter of OneSource's Request for Waiver of Section 76.1204(a)(1) of the Commission's Rules*, Mem. Opin. & Order, DA 07-2009 ¶ 16 (rel. May 4, 2007) (granting OneSource's request conditioned on OneSource going all-digital by December 31, 2007).

complying with the integration ban.<sup>16</sup> James Cable, for example, says that it has lost 28% of its subscribers since 2001, was forced into bankruptcy in 2003, and had negative free cash flow of at least \$3 million each year from 2002 through 2005, and that imposition of the integration ban at this time would derail investment plans critical to its competitiveness with much larger DBS operators.<sup>17</sup> Likewise, Great Plains states that it is burdened with significant debt and operated at a seven figure loss last year and cannot afford the costs associated with the integration ban.<sup>18</sup> As James Cable and Great Plains point out, the Media Bureau granted a waiver to Charter based on similar financial difficulties,<sup>19</sup> and should now provide similar relief to these petitioners.<sup>20</sup>

It is not surprising that the absence of waivers for these small systems would threaten their financial viability, given the significant costs associated with compliance with the integration ban. For example, the DCT-700 cannot accommodate the CableCARD; rather, an entirely different set-top box, with a larger chassis, greater power supply, and a redesign of the motherboard, among other things, is required.<sup>21</sup> These modifications plus the CableCARD add significantly to the overall cost of the set-top box. Consequently, and in recognition of the lack

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<sup>16</sup> See Great Plains Waiver at 5-6; James Cable Waiver at 7-8.

<sup>17</sup> See James Cable Waiver at 7.

<sup>18</sup> See Great Plains Waiver at 5-6.

<sup>19</sup> See *In the Matter of Charter Communications Inc.'s Request for Waiver of Section 76.1204(a)(1) of the Commission's Rules*, Mem. Opin. & Order, DA 07-2008 ¶ 20 (rel. May 4, 2007).

<sup>20</sup> James Cable and Great Plains would also confront the added costs of upgrading their legacy Quick Take and HITS<sup>2</sup>HOME systems to support CableCARD-enabled devices. See James Cable Waiver at 10; Great Plains Waiver at 4-5. These systems have the option of deploying Motorola's Quick Take Plus, National Authorization Service-Regional Access Controller ("NAS-RAC"), or National Authorization Service ("NAS") solutions -- all of which will provide support for digital set-top boxes or retail cable-ready equipment that utilize CableCARDS -- but for some of these small systems any additional system costs are difficult to bear.

<sup>21</sup> See, e.g., Motorola Comments, filed in CSR-7139-Z *et al.*, CS Dkt. No. 97-80, at 5-6 (May 3, 2007); Motorola Comments, filed in CSR-7129-Z *et al.*, CS Dkt. No. 97-80, at 3 (Apr. 2, 2007); Motorola Comments, filed in CSR-7109-Z *et al.*, CS Dkt. No. 97-80, at 4 (Mar. 5, 2007); Motorola Comments, filed in CSR-7012-Z, CS Dkt. No. 97-80, at 3 (Feb. 14, 2007); Motorola Comments, filed in CSR-7012-Z, CS Dkt. No. 97-80, at 4 (June 15, 2006).

of marketplace demand for higher cost boxes with only limited features, the current lowest-cost CableCARD-enabled set-top box Motorola is manufacturing -- the DCH-100 -- costs substantially more than the DCT-700, even in higher volumes.<sup>22</sup>

Motorola is not alone in describing this marketplace reality as Pace and Cisco have also filed comments in this docket about the prohibitive costs and impracticability of incorporating CableCard technology into their low-cost set-top boxes.<sup>23</sup> Furthermore, as other commenters in this docket have noted, the CableCARD requirement will have significant cost impacts on *all* digital set-top boxes, not merely low-cost boxes.<sup>24</sup> These added costs -- and the circumstances surrounding the digital transition plans and/or financial condition of these particular waiver applicants -- justify grant of the time-limited waivers for any higher-end set-top box covered by the Waiver Requests, such as the DCT-3412, DCT-6200, and DCT-6412.<sup>25</sup>

In short, grant of the waivers for the above-referenced boxes and applicants is not only supported by recent Commission precedent, but also makes eminent sense in that the consumer

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<sup>22</sup> Likewise, these operators will incur significant CableCARD-related costs in the absence of waivers for the DCT-1000, DCT-2000, DCT-2500, DSR-410, and DSR-470.

<sup>23</sup> See, e.g., Pace Comments, filed in CSR-7012-Z, CS Dkt. No. 97-80, at 3 (Feb. 14, 2007); Cisco Comments, filed in CSR-7012-Z, CS Dkt. No. 97-80, at 2 (Feb. 14, 2007).

<sup>24</sup> See *In the Matter of Verizon's Petition for Waiver of the Set-Top Box Integration Ban*, 47 C.F.R. § 76.1204(a)(1), Petition for Waiver, CS Dkt. No. 97-80, CSR-7042-Z, at 15 and Whitton Decl. ¶ 11 (Aug. 8, 2006) (noting that CableCARD requirement would add upwards of \$95 to the wholesale price of the device -- \$25 for CableCARD-components in the set-top box and an additional \$50-70 for the CableCARD itself); see also *In the Matter of NCTA's Request for Waiver of the Set-Top Box Integration Ban*, 47 C.F.R. § 76.1204(a)(1), Request for Waiver, CS Dkt. No. 97-80, CSR-7056-Z, at 7-8 (Aug. 16, 2006) ("The cable industry has estimated that the re-engineering required to enable their leased devices to work with CableCARDS would add approximately \$72-93 per box -- which translates into two or three dollars more [per box] in monthly lease charges to consumers -- and that the direct cost to the cable industry to implement the CableCARD would exceed \$500 million per year.").

<sup>25</sup> As noted, *supra* note 2, the Volcano Waiver covers limited-capability boxes (*i.e.*, the DCT-700, DCT-2000, and DCT-2500) as well as boxes with HD and/or DVR functionality (*i.e.*, the DCT-3412, the DCT-6200, and the DCT-6412). See, e.g., <http://broadband.motorola.com/consumers/products/dct3400/default.asp> (describing functionality of DCT-3400 series boxes); <http://broadband.motorola.com/consumers/products/dct6200/default.asp> (describing functionality of DCT-6200); <http://broadband.motorola.com/consumers/products/dct6412/default.asp> (describing functionality of DCT-6412).

value of these existing boxes is significant, and the costs that would be caused by waiver denial would far outweigh any benefits.<sup>26</sup>

For the foregoing reasons, and those set forth in the Waiver Requests, Motorola respectfully asks that the Commission approve these requests for waiver of the integration ban.

Respectfully submitted,

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<sup>26</sup> See Great Plains Waiver at 7 (“If not granted the requested waivers, Great Plains will be forced to stop deployment of its digital services to new subscribers who want to upgrade from analog to digital services.”).

**CERTIFICATE OF SERVICE**

I, Steve B. Sharkey, hereby certify that, on June 14, 2007, copies of the attached Comments of Motorola, Inc. were served via regular mail, on the following:

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