

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, DC 20554

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In re Application of  
**WATCHTV, INC.**

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**FILED/ACCEPTED**  
)  
File No. BSTA- \_\_\_\_\_

For an Experimental License  
To Demonstrate New Digital Television  
Technology at Las Vegas, Nevada

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**NOV - 8 2010**  
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Federal Communications Commission  
Office of the Secretary

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*Federal Communications Commission*

To: Chief, Low Power TV Branch, Video Division, Media Bureau

**APPLICATION FOR EXPERIMENTAL SPECIAL TEMPORARY AUTHORITY**

1. Introduction. Pursuant to Section 73.1510 of the Commission's Rules and Regulations, WatchTV, Inc. (WatchTV) hereby requests special temporary authority to demonstrate a new technology that offers the prospect of a potential significant improvement in the technical art of television broadcasting.

2. Purpose of the Experiment. The proposed experimental operation is intended to enable WatchTV to demonstrate new technology to FCC personnel at a meeting to be held November 17, 2010, at the FCC's offices in Washington, DC.

3. Term of Authorization. WatchTV requests authority to operate from **November 16, through November 18, 2010.** While the demonstration is planned for November 17, some flexibility is requested in case the meeting has to be rescheduled at the last minute.

4. WatchTV's Technology. The demonstration will show how orthogonal frequency-division multiple access (OFDMA) modulation can provide both broadcast and efficient broadband services at the same time, including delivery to mobile receivers. The technology is more efficient than the ATSC television standard and can be managed more easily to avoid interference to existing ATSC digital and NTSC analog full and low power television services.

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5. Legal Qualifications. WatchTV is the licensee of several broadcast stations, including KORS-CD, Facility ID 71069, and thus has been found qualified to be a Commission licensee. All owners of WatchTV are U.S. citizens.

6. Transmitter Sites. WatchTV proposes to operate in a meeting room provided by the FCC at 445 – 12<sup>th</sup> St., S.W., Washington, DC 20004. The coordinates are:

38° 53' 08' N  
77° 02' 06" W

7. Operating Parameters. The proposed operating parameters are as follows:

a. Frequencies:

500-508 MHz (Channel 20, plus 2 MHz of Channel 21)  
650-658 MHz (Channel 44, plus 2 MHz of Channel 45)

b. Effective Radiated Power: not more than 5 milliwatts (0.005 watts)

c. Antenna Height:

Above Ground: not more than 24 meters (depending on meeting room assigned by FCC)

Above Mean Sea Level: not more than 29.2 meters (site is 5.2 m AMSL)

d. Emission Designator: 8M00D7W (8.0 MHz occupied bandwidth)

8. Airspace Protection. Operation will be inside an existing building. Thus there can be no impact on air navigation.

9. Environmental Protection. As indicated below, the proposed maximum ERP from any one antenna is only 5 milliwatts. This level is below the threshold of human exposure concern in 47 CFR §1.1307(b)(1) and is exempt from further analysis under that rule. No permanent physical facilities will be constructed, so there will be no adverse visual or other environmental impact.

10. Frequencies. A study has been undertaken to determine which UHF television channels may be used at the proposed location without causing interference to any operating

broadcast station of any class, primary or secondary. The occupied bandwidth for this demonstration will be 8 MHz, which is wider than a single conventional TV channel and thus requires occupancy of two conventional TV broadcast channels. Operating frequencies have been chosen to leave a guard band of at least 4 MHz between the proposed operation and any first-adjacent broadcast station that has a receivable signal in the area.

a. Channels 20-21: According to the Commission's TV Query program, there are no operating co-channel stations within 75 km. of the Commission's headquarters building on Channels 19-21.<sup>1</sup> WDDN-LD, Facility ID 167016, Washington, DC, holds a construction permit for an unbuilt companion digital station on Channel 21 (BDCCDTL-20061030ABV); but that permit has been modified to specify operation Channel 22 (BDISDTL-20100119AEN), and WDDN-LD is currently operating under a digital STA on Channel 22 (BSTA-20100223AAT).

b. Channels 44-45: Within 75 km. of the Commission's headquarters building, Channel 43 was occupied by WPXW-TV, Facility ID 74091, Manassas, VA; but that station has moved to Channel 34 (BLCDT- 20090612AIZ). Channel 44 is authorized to WIAV-LD, Facility ID 168063, Washington, DC (BMPDTL-20090630ADG); but the facility is unbuilt. Channel 45 is authorized to W23DF-D, Facility ID 135165, Crofton, MD, at a distance of 40 km; but a DTV tuner showed no detectable signal in Arlington, VA, when set to Channel 45 on November 8, 2010. The nearest station on Channel 46 is WBFF-DT, Facility ID 10758, Baltimore, MD.

11. Equipment. Transmitters will be provided by China Multimedia Mobile Broadcasting (CMMB), Signal Generator Model SCS100B, which is designed for low power demonstration applications. This model does not hold an equipment authorization from the FCC, but an equipment authorization is not required for experimental operation. CMMB is an

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<sup>1</sup> Land mobile facilities occupy Channels 17-18 in Washington, D.C.

experienced electronics company, whose equipment may be relied upon not to generate spurious emissions that might cause interference. A generic unity-gain antenna will be used.

12. Market Trials. No market trials will be undertaken under the experimental authority requested in this application.

13. Acknowledgement of Secondary Status. WatchTV acknowledges that its experimental operations will be secondary to all existing authorized stations, including low power television and TV translator stations which are otherwise secondary to full power television stations. If any interference is caused to any other authorized station, it will immediately be resolved by adjusting operating parameters or shutting down operation on a specific frequency or frequencies if necessary to cure the interference.

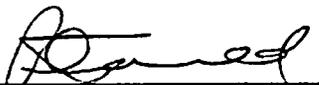
14. Section 304 Statement. The Applicant hereby waives any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application.

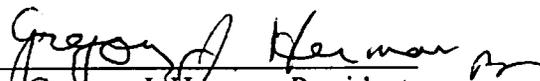
15. Anti-Drug Abuse Certification. The Applicant certifies that neither Applicant nor any party to this application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.

Of Counsel:

Respectfully submitted,

WATCHTV, INC.  
FRN 0003-7671-75

  
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