REDACTED FOR PUBLIC INSPECTION

September 7, 2016

Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Request for Confidential Treatment

MC10, Inc. ("MC10") submits this application for Conventional Experimental License (the "Application") addressing those matters which the Application is required to address under 47 CFR5.61. By separate letter, MC10 requests confidential treatment of certain portions of Exhibit A to the Application.

Pursuant to 47 CFR 5.53 and 5.54, the "public redacted" version of Exhibit A to MC10's Application is set forth in Exhibit C to the Application.

Exhibit A to MC10 Conventional Experimental License Application

1. Detailed explanation of why the conventional experimental license is needed.

A conventional experimental license is required for conducting an experimental study with the Massachusetts General Hospital (MGH) using Proof of Concept devices designed and manufactured by MC10, Inc. The purpose of this study is to further the development of a novel experimental medical device that can [redacted]. In particular, these devices will be useful for characterizing and quantifying [redacted] patients suffering from [redacted]. The learnings from this experiment will help drive improvements to both device hardware and software architectures, facilitating the pathway for the device to be released to market. The study, which started in March 2016 under a Special Temporary Authority (STA) (provided as Exhibit D), has taken longer than anticipated due to slow patient enrollment. The conventional experimental license would allow us time to complete the study.

Per its Institution Review Board (IRB) application process, MGH requested that MC10 obtain an STA or experimental license from the FCC for wireless devices used in experimental studies. The MC10 device uses a Commercial Off-the-Shelf (COTS) Near-Field Communications (NFC) tag and a custom inductive coil antenna. MC10 is currently operating pursuant to an STA (provided as Exhibit D), which is set to expire on September 8, 2016. To facilitate the execution of the study and further MC10 innovation and technology development, the experimental license represents the most effective means for completing the study in a reasonable time frame. Furthermore, the six 24 month exemption the experimental license offers is an ample amount of time for MC10 to properly deploy, use and evaluate the performance of the device for this study, after acknowledging the slow pace of patient recruitment.

2. Detailed explanation on the type of operation that will be performed.

The study will involve patient volunteers who wear a MC10 designed and manufactured Proof of Concept device (patch) to [redacted]. An MGH clinician will use an NFC-enabled mobile device, Samsung S5 Android phone, to activate the patch and take an [redacted] reading. Once the patch is activated, it will continue to log [redacted] to internal memory. The device does not transmit any information while logging. The patient will be sent home. After 24 hours, the patient will return to the clinic. The clinician will bring the Samsung S5 within 1cm of the patch and heart-rate data will be transferred to the Samsung S5. In both cases, for initial and final data transfers, the NFC-enabled mobile device, Samsung S5, must be within 1cm of the patch's magnetic coupling range to transfer information. Data communication takes approximately 30 seconds. Wireless transmission is limited to those two instances. Furthermore, according to the NFC standard, the patch modulates the magnetic-field signal from the Samsung S5 and does not actively transmit or broadcast power on its own.

No Personally Identifiable Information will be telemetered via the device. In addition, all data is encrypted from end to end with [redacted]. The volunteer will wear [redacted] after which time the device will be returned to MC10.

REDACTED FOR PUBLIC INSPECTION

Technical Details

The MC10 experimental device contains [redacted]. It is passive and does not intentionally emit any RF energy. Rather, it modulates the signal emitted by an NFC-enabled Mobile device, rectifying both power and data. In the case of the study, the Mobile device is a Samsung S5 (Model SM-G900H. FCC ID: A3LSMG900H). When the MC10 device is brought within 1cm of the Samsung S5, the latter transmits a modulated 13.56MHz signal through its coil antenna. The [redacted] in the MC10 device demodulates the signal and [redacted]. Using the [redacted], the MC10 device can also modulate the incoming 13.56MHz signal to communicate with the S5.

The MC10 NFC antenna [redacted] with the following physical dimensions:

[redacted].

3. Description of the Geographical location and environment the operation will be performed.

The device will be used inside the Holter Lab at Mass General Hospital
55 Fruit Street
Boston, MA 02114
NAD 83 Latitude: 42.3631°N = 42° 21' 47.2"N Longitude: 71.0694°W = 71° 04' 9.8"W

This location was selected because it is where medical home monitors are applied on patients and it adheres to Massachusetts General Hospital's clinical workflow .

4. Description of any and all associated equipment used during operation

A Samsung S5 smart phone will be used to perform initialization (30 sec data transfer at the start of the study) and final data transfer (30 sec data transfer at the end of the study). Between the initial and final data transfers, the MC10 medical device is not modulating any magnetic field signal.

Model number: Samsung Galaxy S5 SM-G900H
FCC ID: A3LSMG900H

5. Letter requesting confidentiality (if desired).

Per CFR Title 47 0.457(d) and 0.459