INVENTION DISCLOSURE

1. **Invention Title.**

   MPEG Voice Mail

2. **Invention Summary.**
   Cable subscribers can use a STB to retrieve voice mail messages left for their digital voice account without requiring the use of a telephony device or client.

3. **Invention Description**.

a. **Describe the invention in detail and/or attach a description, drawing(s) and/or diagram(s), if available. <u>Please include flow charts for descriptions of software processes, and block diagrams for descriptions of hardware systems</u>. Include the description/attachments in electronic form if possible.**
   Currently digital voice customers must use a telephony device to retrieve voice messages stored in their voice mail account. A new, interactive, approach is to utilize the existing video distribution infrastructure and VOD concepts for voice mail access. The invention is expected to work as follows:
   1. The user invokes a VM application on their STB, this may be a locally executed application or could simply be tuning the STB to a particular channel with interactive capability (return path)
       a. In the case of a locally executed application, the STB would be instructed to tune to a particular channel which would provide audio and possibly video.
   2. Once the application is invoked, the user would use the STB remote to key in the voice mail box number and associated password
   3. At this point the TV display and remote become an interactive voice mail system interface. The TV may display VM information such as # of new messages, # of saved messages, etc. and allow the use of the remote navigation functions and keypad to progress through the VM menu system and identify a voice message to review.
   4. Once a message is selected, the audio is embedded into the mpeg video stream and delivered to the STB for playout on the TV or externally connected audio device.

   Note, when using a locally executed application a video stream from the VM system would not be necessary and the local display would be updated based on out of band feedback from the VM system. Audio would be streamed to the STB over an MPEG channel much in the same way music is currently provided by a number of cable operators.

b. **Why was the invention developed? What problem(s) does the invention solve? How is it better?**
   Currently voice mail has to be accessed via a telephony device or a computer (usually via email). While there has been some interest in playing a SIP client on a STB to provide telephony functions, this invention allows for cross platform integration without requiring

significant STB hardware modifications (e.g., adding DSP support for traditional telephony codecs).

c.   Briefly outline the potential commercial value and customers of the invention.
MSO's would be able to increase the number of cross platform services with minimal infrastructure investment and maximum STB reuse. Customers benefit from having multiple methods for methods for retrieving voice messages as well as have a graphical user interface to the VM system which may allow the user to fully leverage the VM system capabilities.

4.   HOW is your invention different from existing products, processes, systems?
Please list the closest publication(s), product(s), method(s), patent(s), etc. to your invention.   <u>For each item, how is your invention different?</u>
There have been or are products/systems that support a visual voice mail concept which primarly entails placing a graphical user interface on the VM system beyond the traditional IVR process. This invention goes beyond the GUI to modifying the actual delivery of the voice message itself over the video distribution infrastructure.