

INVENTION DISCLOSURE

1. **Invention Title.**

Methods for choosing video quality based on user location with respect to screen

2. **Invention Summary.**

As part of this innovation we are proposing that the device being used to watch video keeps track of the user with respect to the screen and reports it to the video server (e.g. Video GW in the house or in the cloud). Video server takes the user location into consideration when choosing the encoding rate for the video.

3. **Invention Description.**

There are Adaptive bit rate codecs that change the quality of video based on the network conditions. In simple terms, if the network is slow and congested, the video server changes the video to a lower bit stream. When the network is not congested, the video server changes the video to a higher rate bit stream.

This method works but it does not take into consideration the user.

As part of this innovation we are proposing that the device being used to watch video with keeps track of the user with respect to the screen and reports it to the video server (e.g. Video GW in the house or in the cloud). Video server takes the user location into consideration when choosing the encoding rate for the video.

For example if the user is far away from the screen, the video server can lower the encoding rate to an appropriate level.

Another example, if the user is not located around the screen, the video server can lower the encoding rate for both audio and video.

Another example, if the user eyes are not focused on the screen, the encoding rate can be lowered until user focus returns to the screen.

All these methods are very useful in saving network bandwidth and at the same time providing/maintaining the expected quality of experience.

Briefly outline the potential commercial value and customers of the invention.

The amount of video traffic on operator network is increasing exponentially. It is important for the industry to deliver video in the most efficient manner possible. This innovation will allow operators to maximize the use of network resources while maintaining the video quality.

4. **How is this invention different from existing products, processes, systems?**

No such invention exists.