INVENTION DISCLOSURE

1. **Invention Title.**

   ## Method and apparatus for changing advertisements dynamically.

2. **Invention Summary. Give a concise (30 words or less) summary of the invention.**
   This invention describes a method of dynamically changing the current playing advertisement on a program, based on user input and having the backend systems respond by inserting a new advertisement in its place.

3. **Invention Description**.

a. **Describe the invention in detail and/or attach a description, drawing(s) and/or diagram(s), if available. Please include flow charts for descriptions of software processes, and block diagrams for descriptions of hardware systems. Include the description/attachments in electronic form if possible.**

Television viewers experience approximately nine minutes of advertisements per half hour show. Some advertisements are appealing to the viewer, and some are unappealing. This invention provides a mechanism for the viewer to register positive or negative feedback on an advertisement through one or more of the following: an advertisement feedback button on the remote control, a brainwave scanner interface (currently used to measure viewer response to advertisements in focus group settings), an eye tracking device, or similar mechanism.

The feedback message is transmitted to the operator's head-end equipment. In the case of a negative feedback message, the request triggers a replacement advertisement (based on that viewer's preference information) from the Advertisement-Server, which is inserted in real time in place of the existing advertisement. Both positive and negative feedback messages trigger an update of the viewer preference database with the advertisement in question and ad category. The backend systems can use the viewer ad preferences to target only ads which are somewhat related to the ads which the user prefers to watch.

Aggregate feedback information can be sent to broadcasters and advertisers. These organizations could use it to design more effective campaigns.
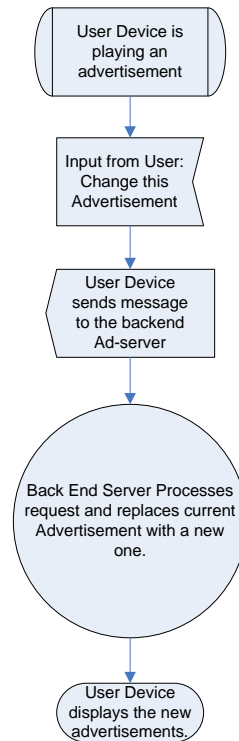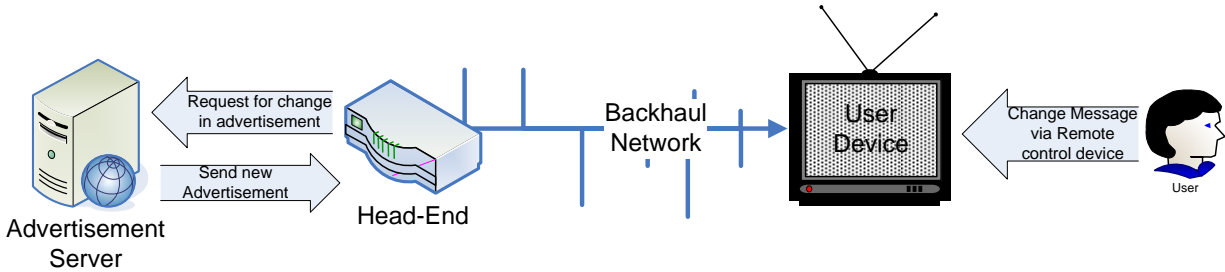
b. **Why was the invention developed? What problem(s) does the invention solve? How is it better?**

This invention was developed during a brainstorming meeting discussing methods to strengthen relationships between the cable industry and its customers. In the era of digital video recorders and video on demand, viewers are showing their displeasure with ads by fast forwarding past them or by switching to less advertising-intensive media delivery. We believe that viewers would be more inclined to watch advertisements if they liked them (as evidenced by Super Bowl viewing patterns). A feedback mechanism would allow viewers to signal the types of advertisements that they like and do not like. This feedback would allow cable operators to sell more targeted ads and would help ad producers create better media campaigns. It would also enhance viewer loyalty, as the viewers would not be subjected to ads that they consider inappropriate or offensive.

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

Television Program production companies, cable operators and TV broadcasting companies will be able to sell more targeted advertising. MSOs can also sell feedback to advertisers, who can use the feedback to generate more successful campaigns.

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.   For each item, how is your invention different?

Method and apparatus for providing demographically targeted television
Patent number: 5155591

Technique for testing television commercials
Patent number: 4647964

A communication system capable of targeting a demographically or psychographically defined audience.
Patent number: 5446919

Television event marking system
Patent number: 5907322

All of the above ideas suggest methods for testing out the success of commercials in a focus group setting before they get released.

Our invention is a method of gauging the popularity of an advertisement with the actual audience. This is a unique way the operators can collect feedback to support targeted advertising and give accurate feedback to the advertising producers about how the audience receives advertisement campaigns.

Also, the operators can enhance viewer loyalty and reduce ad skipping when viewers enjoy the ads.