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## Patent Search

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### Abstract:

ABSTRACT A SPEECH SIGNAL PROCESSING SYSTEM FOR AUTOMATED VIRTUAL ASSISTANT IN ELECTRONIC GAMING DEVICE AND METHOD THEREOF [discloses a speech signal processing system for automated virtual assistant in electronic gaming device and method thereof. The system includes, but is not limited to, an audio interface adapted to receive and process an input voice signal from user; an artificial intelligence-based interface provided with a processing unit for processing the input voice signal to generate a communication representing a plurality of game states and game output from the video and audio interface; and a virtual assistant unit to animate a character on the video and audio interface. Further, a game output console adapted to convert and translate the plurality of game states and game output from the interface into animated behavior information and animated speech information for input to the virtual assistant unit. Accompanied Drawing [FIG. 1]

## Complete Specification

### Claims:We Claim:

1. A speech signal processing system for automated virtual assistant in electronic gaming device, comprising:  
a video and audio interface adapted to receive and process an input voice signal from user;  
an artificial intelligence-based interface provided with a processing unit suitable for receiving data communication representing a plurality of game from the video and audio interface;  
a virtual assistant unit to animate an automated virtual assistant on the video and audio interface; and  
a game output console adapted to convert and translate the plurality of game states and game output from the video and audio interface into anir information and animated speech information for input to the virtual assistant unit.
2. The system as claimed in claim 1, wherein the input voice signal is further converted into at least two sequential Digital Signal Processors (DSP signal processing; and a memory unit for storing data, the memory unit being accessible by the sequential Digital Signal Processors (DSPs).
3. The system as claimed in claim 1, wherein the processing unit is configured to connect with a transmitter unit adapted to provide non-optical e via a gaming console antenna connected and a receiver unit operable to receive a resonant response from the artificial intelligence-based interface identification information within a range of the provided non-optical electromagnetic energy via the gaming console antenna.
4. The system as claimed in claim 1, wherein the virtual assistant unit is configured with a plurality of gaming sensors including a directional micr input from a user proximate to the system and a natural language processing unit configured to identify voice signal detected from user via the ga

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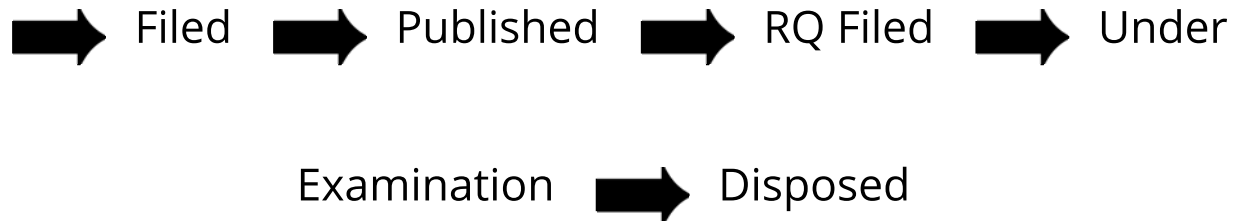
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