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## Viewing posture assistance controlled by earphones sensor for self-adjustable display product

HP INC

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## Viewing posture assistance controlled by earphones sensor for self-adjustable display product

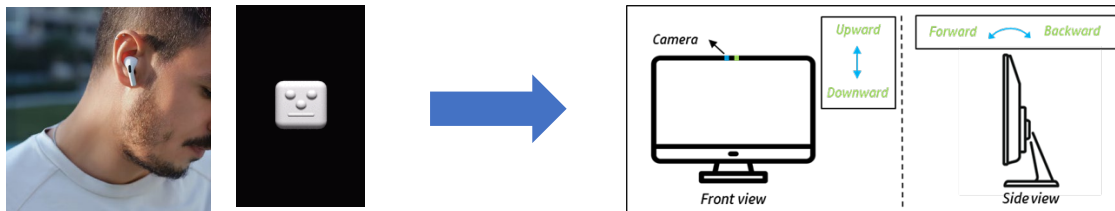
### Abstract

According to online poll from the All About Vision eye health website, remote workers spent roughly 6 hours and 43 minutes, 6 hours and 11 minutes for on-site peers in their workday. Staring at the screen within a bad position too long could really be harmful for our neck, back and shoulders.

To prevent slouch and other body pain, we provide a self-adjustable display controlled by wearable device. This innovation idea combines display with electrical motor bracket and wearable device.

### Problems Solved

Compare with prior solution, we delivered a new solution to provide users a better viewing posture and secure privacy issue simultaneously. A new detecting method to lower customers privacy concern.



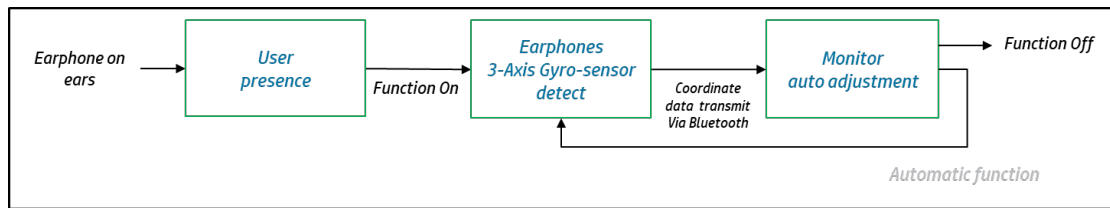
### Prior Art

Most of displays don't require electrical bracket, only few provide electrical adjust function. These self-adjustable displays are using image sensor to detect user, but camera privacy issue is still highly concern for users.

### Product Drawing:

Based on our innovation concept, user should wear earphones, the sensor inside of earphones would detect user's head motion and position. The three-axis coordinate position data will be sent to AI model embedded in display product via wireless transmission, and display will

automatically adjust position based on the result from AI model. The function loop would be trigger after user posture changing.



### Advantages

1. Privacy: Utilize non-image sensor detection to replace image sensor to lower privacy concern.
2. Ergonomics: Self-adjust monitor position to Offer users a better viewing posture to prevent tech neck and slouch issue.
3. Premium: Combine display of self-adjust function and posture detection to provide users a set of high quality and efficient working equipment.

**Disclosed by Anderson Chen, Kun-Hung Lin, Justina Wang, Danny Lee, HP Inc.**