

INVENTION DISCLOSURE

1. Invention Title.

Methods for saving power based on user location with respect to screen

2. Invention Summary.

There are products (e.g. your laptop) that detect user activity and switch off the screen if the user has been inactive for certain amount of time. This is good as it saves power among other things. What these products don't consider today is the location of the user with respect to the screen. In this disclosure we propose that products with screen shall also consider user presence, orientation, location with respect to the screen to decide brightness of the screen and also turn the screen on and off based on the presence.

3. Invention Description.

As part of this innovation we are proposing that a device with a screen keeps track of the user(s) location, orientation, angle, distance (horizontal and vertical) with respect to the screen and uses this information to control various characteristics of the screen in the following manner:

1) If the screen detects that no user is present in front of the screen, then it can either decide to switch off the screen or reduce the brightness. The device should stay in this state until it detects user presence in front of the screen. Once such a detection is made, brightness should be increased to normal level or the screen should turn on if it had turned off previously.

2) The screen not only takes into consideration user location as described previously, but it also takes into consideration the ambiance to decide brightness and contrast. For example, if there is a lot of light in the room, the screen turns the brightness of the screen down.

3) If the screen detects that there is a child close to and staring at the screen, then the screen should turn the brightness down.

4) The Screen learns the user preference and associates them with user's face. When the same user returns, the screen uses the facial recognition system to change the setting such as contrast, brightness.

5)

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

Given the amount of interest and work towards "green" technologies, this invention has the potential to save a lot of energy. This invention is also applicable beyond cable as it applies to TVs, Tablets, phones, PCs etc.

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

I am currently not aware of prior art on this invention.