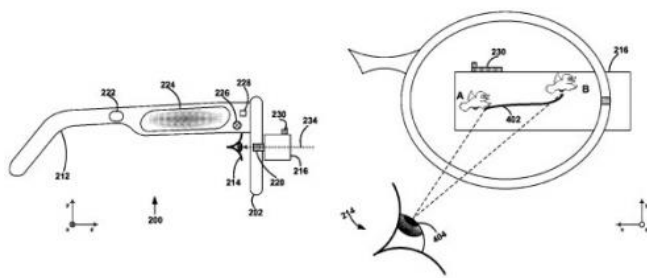


Google patent calls on eyes to unlock smart glasses

9 August 2012, by Nancy Owano



(Phys.org) -- In patent language, the application granted to Google this week says simply "Unlocking a screen using eye tracking information" but the message seems clear enough that Google plans to offer a way for wearers of Google headsets from its Project Glass to unlock their systems with just movements of their eyes. The patent describes a number of systems and methods for seeing to it that eye movements will cause the computing system to switch from being in locked mode of operation to unlocked mode, based on eye-tracking information.

The technology furthers the ideal of hands-free computing for wearable devices without having to resort to disconcerting gestures, waves, and taps when in public view. Google will benefit in strengthening its past history of coming up with the simple yet innovative for end users. The methods for making the eye tracking and eye movements work include projecting moving objects and displaying a path for the eye to follow. Alternatively, a method might consist of displaying text, and tracking the eye's movement and speed to determine whether the user is actually reading the text. Reading through lines of text would unlock the device.

The patent was filed in November last year but was made public this week. One of the inventors is

Hayes Raffle; the other two are Adrian Wong and Ryan Geiss. Raffle is an award-winning product and interaction designer. His title at Google is Staff Interaction Designer, working on Project Glass. Project Glass is one of other projects being built inside the [Google](#) X lab near Mountain View, California. His past experience includes a lot of tinkering at the MIT Media Lab where he invented technologies and materials for interpersonal communication.

According to the [patent](#), "Methods and systems for unlocking a screen using eye tracking information are described. A [computing system](#) may include a display screen. The computing system may be in a locked mode of operation after a period of inactivity by a user. Locked mode of operation may include a locked screen and reduced functionality of the computing system. The user may attempt to unlock the screen. The computing system may generate a display of a moving object on the display screen of the computing system. An eye tracking system may be coupled to the computing system. The [eye tracking](#) system may track eye movement of the user. The computing system may determine that a path associated with the eye movement of the user substantially matches a path associated with the moving object on the display and switch to be in an unlocked mode of operation including unlocking the screen."

More information: [Patent](#)

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