Licensing Opportunity

UNIVERSITY HOSPITALS OF GENEVA

530-A344MK
Algorithms for visual control system

Invention
The invention constitutes of algorithms for rapid analysis of neural activity due to visual stimuli as used in the "*Geneva Brain Computer Interface*" [1)]

1) Public demonstration on
http://www.electrical-neuroimaging.ch/videos/gbcitsrshow070513_low.wmv
http://www.youtube.com/rolandograve

Applications
The high efficiency of the algorithms advocate possible implementation in a control system of an equipment for people with impairment of motor functions.

A separate command module that analyses EEG signals and translates them into industry-standard electrical commands for equipment control could be envisaged.

While the invention has been originally developed and successfully tested as a wheelchair control, the field of possible applications is broad enough to include the use, for example, in virtual reality enhancement, smart (home) environments, etc.

Advantages
The main advantage over state of the art solutions is the speed in which the algorithms recognize and analyze brain activity. Thus, permit their use in time-critical applications like motion control.

Market size
The market for initial application in wheelchair control is estimated below 100 per year in Europe and US. The video games industry is constantly growing and market size was worth $9 billion in 2007 (PwC).

Status
Software licences available

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