

Title (en)  
IMPROVED NEUROLOGICAL FEEDBACK DEVICE

Title (de)  
VERBESSERTE NEUROLOGISCHEN RÜCKKOPPLUNGSVORRICHTUNG

Title (fr)  
DISPOSITIF DE RETOUR NEUROLOGIQUE AMÉLIORÉ

Publication  
**EP 3429469 A1 20190123 (FR)**

Application  
**EP 17714856 A 20170314**

Priority  
• FR 1652279 A 20160317  
• FR 2017050567 W 20170314

Abstract (en)  
[origin: WO2017158273A1] The invention relates to a neurological feedback device comprising a memory (4) for receiving electroencephalogram data and raw functional and metabolic magnetic resonance imaging data, an electroencephalogram block (10) comprising at least one electroencephalogram processing unit (14, 16, 18) arranged so as to process raw electroencephalogram data and to calculate a value linked to a brain wave, a functional magnetic resonance imaging block (20) comprising at least one functional and metabolic magnetic resonance imaging processing unit (24, 26, 28) arranged so as to process raw functional magnetic resonance imaging data and to calculate a value of perfusion or oxygenation of certain zones of the brain, a synchroniser (30) arranged so as to synchronise temporally the electroencephalogram data and raw functional magnetic resonance imaging data and the processing thereof in the electroencephalogram block (10) and the functional magnetic resonance imaging block (20), and a calculator (40) arranged so as to determine a score representing a correlation between values associated with a neurological rehabilitation activity and values generated by the electroencephalogram block (10) and the functional magnetic resonance imaging block (20), which are obtained from electroencephalogram and functional magnetic resonance imaging measurements of a patient seeking to reproduce the neurological rehabilitation activity, the device being arranged so as to emit neurological feedback to the patient on the basis of said score.

IPC 8 full level  
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Citation (search report)  
See references of WO 2017158273A1

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