

Title (en)

IMAGE-SYNCHRONIZED MULTICHANNEL BIOMEDICAL DATA ACQUISITION SYSTEM

Title (de)

BILDSYNCHRONISIERTES MEHRKANALS BIOMEDIZINISCHES DATENERFASSUNGSSYSTEM

Title (fr)

SYSTEME D'ACQUISITION DE DONNEES BIOMEDICALES A CANAUX MULTIPLES ET A SYNCHRONISATION D'IMAGES

Publication

EP 1281153 A2 20030205 (EN)

Application

EP 00972094 A 20001012

Priority

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- US 15879499 P 19991012

Abstract (en)

[origin: WO0127855A2] A new video-synchronized multi-channel data acquisition system has been developed for frequency-domain muscle fatigue research. The system records storage-intensive video images onto a video tape, and simultaneously acquires biomedical data and video time codes onto a computer hard disk to achieve high-speed recording a long duration. A video time-code-bridge-file was created by the computer to synchronize the biomedical data with the recorded video frames in realtime. The two-column time-code-bridge-file matches each video frame-start with the corresponding index number of the acquired data. With the bridge file, the system is able to automatically search and output a frame of the acquired multi-channel data correspondent to a given video frame, and also able to search and display a video frame correspondent to a given frame of acquired multi-channel data. Currently, this system is capable of recording 30 minutes of video-synchronized multi-channel biological data with the summed data rate of 2.16 Mbit/sec and synchronization accuracy of 0.22 mS.

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G06F 19/00

IPC 8 full level

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CPC (source: EP US)

A61B 5/0002 (2013.01 - EP US); **G16H 30/40** (2017.12 - EP US); **G16H 40/63** (2017.12 - EP US)

Citation (search report)

See references of WO 0127855A2

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