

**(57) Abstract:** A record carrier (1) according to the invention comprises information organized in a plurality of files containing audio visual data (11) and playback control data (12) for controlling playback of the audiovisual data on a playback device while enabling user interaction. The information further comprises priority information (priority), indicating the relative priority with which the files are to be stored in a cache memory (39) of the playback device. The invention also relates to a device for playing back a record carrier and a method for playing back a record carrier.