## ABSTRACT

**OPTICAL DATA STORAGE AND RETRIEVAL SYSTEM AND METHOD USING GROUP CODE RECORDING FORMAT**

A first write encoder (418) encodes digital data in a first high density format. A second write encoder (416) encodes digital data in a second low density, i.e. ANSI format. A first read decoder (428) decodes digital data from the first format. A second read decoder (426) decodes digital data from the second format. A disk drive (434) receives a replaceable 90 millimeter optical disk. A read/write head (420) reads and writes encoded data on a disk. Control electronics switches (430) depending on the recorded format in a first mode where the first encoder is connected between a source of digital data (410), and in a second mode, the second encoder is connected between the source and the head, and the second decoder between the head and the utilizing apparatus.

FIGURE 10