

DATA RECORDING MEDIUM, DATA RECORDING APPARATUS AND
METHOD, AND DATA REPRODUCING APPARATUS AND METHOD

ABSTRACT OF THE DISCLOSURE

An absolute time area is expanded by using an area of relatively low importance such as zero-data area and/or relative time area or the like in a Q channel in a sub-code in a recording format of a CD. Thus, an absolute time expression which can cope with a disc having a large capacity or the like can be performed. An absolute time expression is performed in a manner such that a digit of "100 minutes" is BCD expressed by using lower 4 bits in the 8-bit zero-data area ZERO. Thus, the absolute time of up to 999min59sec74frame can be expressed. A digit of "hour" is also expressed by using lower 4 bits in the zero-data area. For example, identification information showing that a disc is a high density optical disc of a large capacity is expressed by using upper 4 bits in the zero-data area ZERO.

Fig. 6