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(54) **COPY PROTECTION SYSTEM FOR PORTABLE STORAGE MEDIA**

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(58) **Field of Search** ................................. 713/193, 189, 713/156, 173, 175

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(57) **ABSTRACT**

Systems connected to users generate a plurality of keys which are mutually shared, and download and upload digital contents by using secret channels formed between the systems. An information provider receives an authorization from a certificate authority. A licensed SDMI compliant module (LCM) is authenticated through the information provider, and the information provider and the LCM form a channel. A portable device is authenticated from the information provider through the LCM, and the LCM and the portable device form a channel. The digital content between the LCM and the portable device is downloaded and uploaded according to respective control state data of the LCM and the portable device. The system can use a physical address of a bad sector formed in the portable medium during the manufacturing process for preventing an illegal copy of the downloaded digital contents through the portable device after the digital contents have been downloaded.

**38 Claims, 9 Drawing Sheets**

**FIG. 1**

FIG. 2

130

110

EC_DH(CA, ISP) = K

Generate:
$(PrvKey_{ISP}, PubKey_{ISP}, Cert_{CA}(PubKey_{ISP}))$

MKIT

ENC

DEC

Securely Store

*FIG. 3*

**FIG. 4**
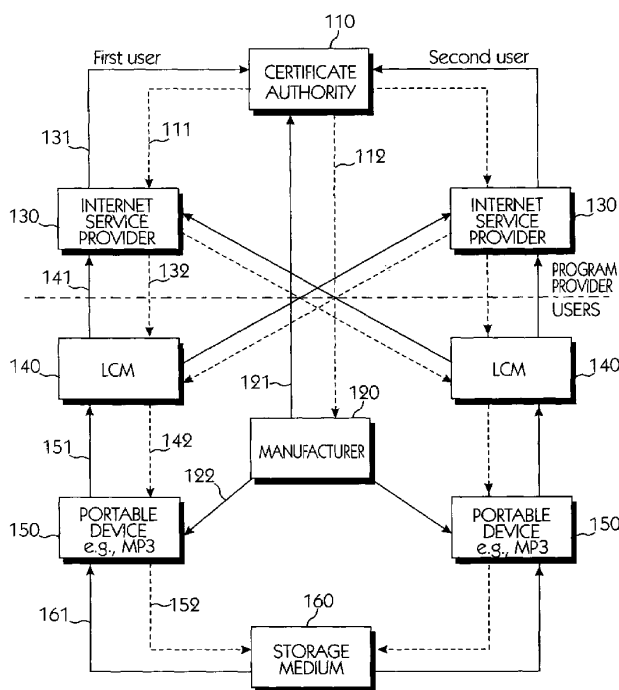
# DOCKET ALARM
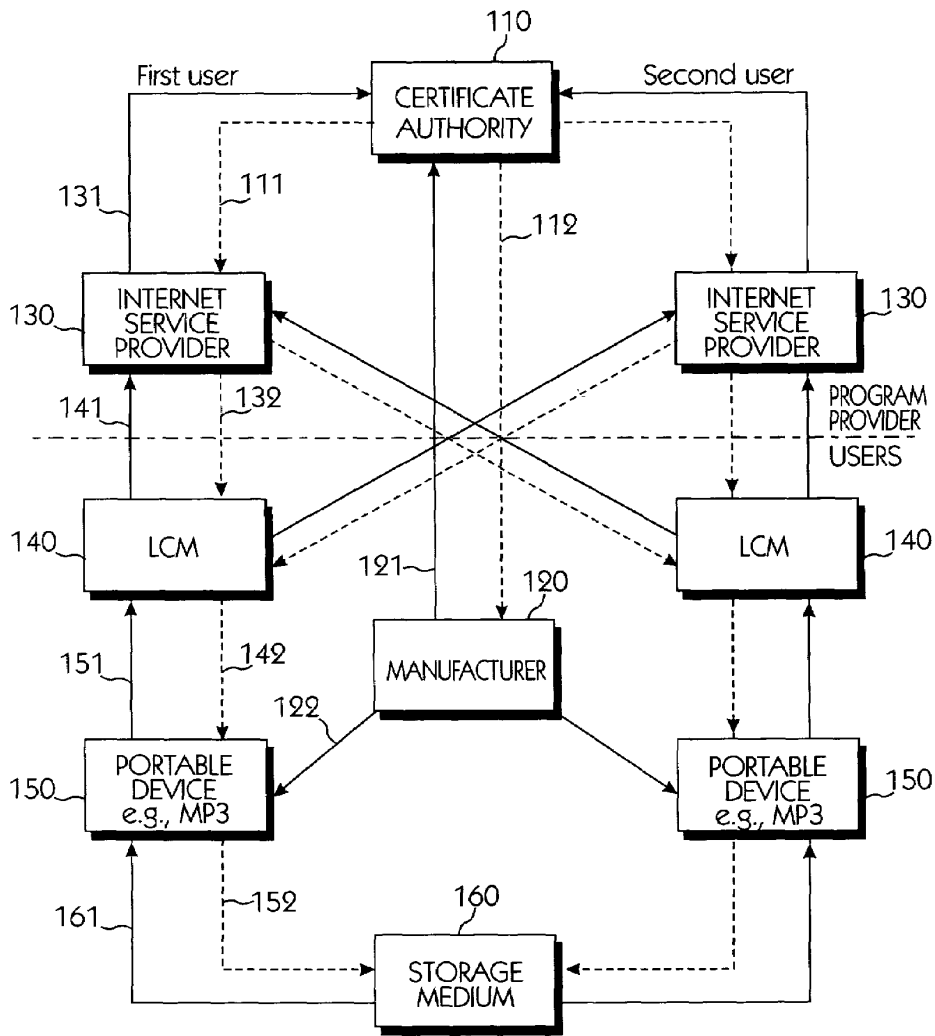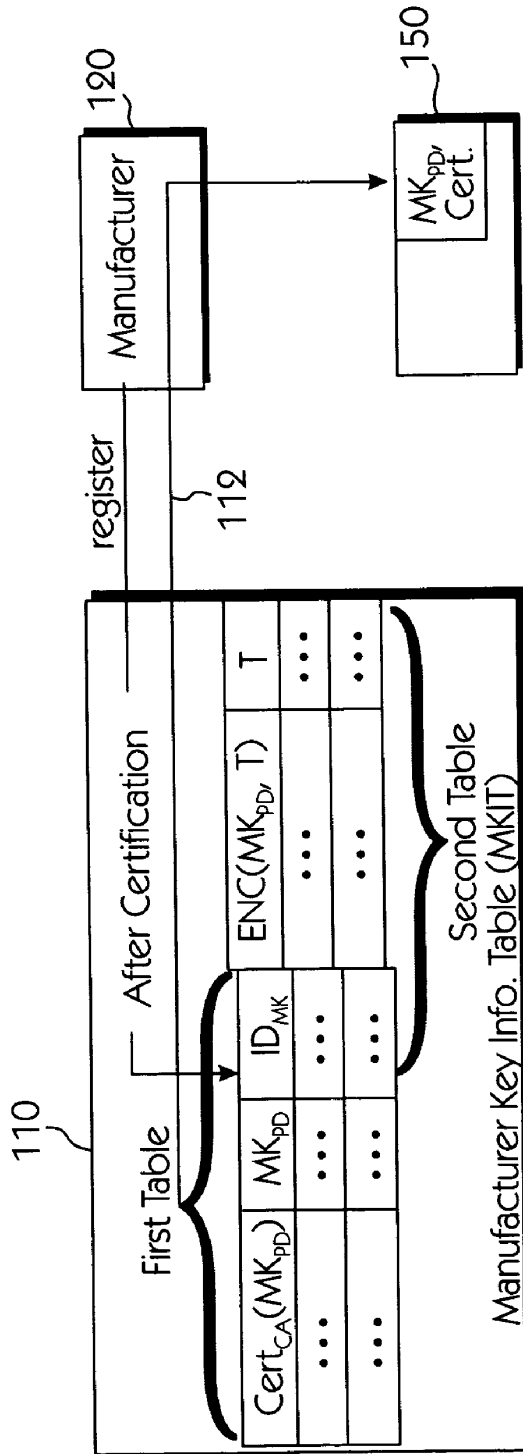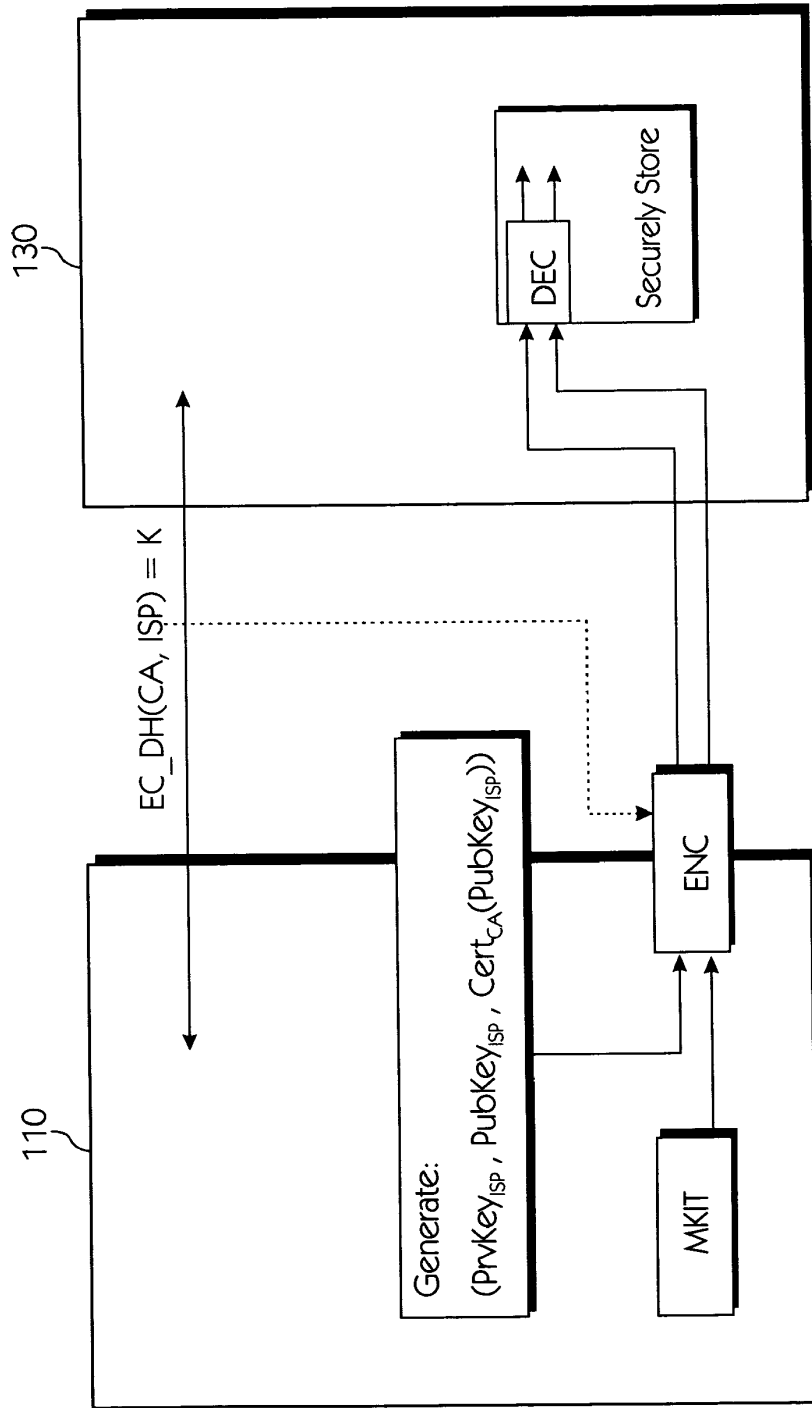
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