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Hulst et al.

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(54) **DATA STORAGE AND ACCESS SYSTEMS**

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Jan. 15, 2008, now Pat. No. 7,942,317, which is a
continuation of application No. 11/336,758, filed on
Jan. 19, 2006, now Pat. No. 7,334,720, which is a
continuation of application No. 10/111,716, filed as
application No. PCT/GB00/04110 on Oct. 25, 2000,
now abandoned.

(57) **ABSTRACT**

Data storage and access systems enable downloading and
paying for data such as audio and video data, text, software,
games and other types of data. A portable data carrier has an
interface for sending and receiving data, data memory for
storing received content data, and payment validation
memory for providing payment validation data to an external
device. The carrier may also store a record of access made to
the stored content, and content use rules for controlling access
to the stored content. Embodiments store further access con-
trol data and supplementary data such as hot links to web sites
and/or advertising data. A complementary data access termi-
nal, data supply computer system, and data access device are
also described. The combination of payment data and stored
content data and use rule data helps reduce the risk of unau-
thorized access to data such as compressed music and video
data, especially over the Internet.

(51) **Int. Cl.**
G06K 5/00 (2006.01)

(52) **U.S. Cl.** **235/380; 235/382**

(58) **Field of Classification Search** 235/380,
235/382, 382.5, 383, 492, 493

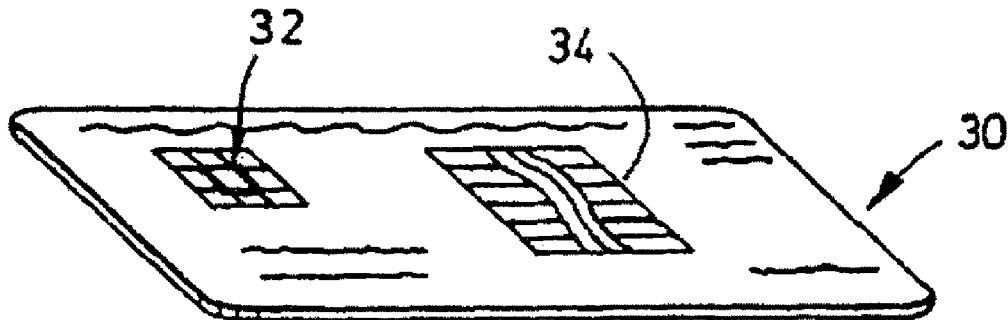
See application file for complete search history.

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12 Claims, 17 Drawing Sheets



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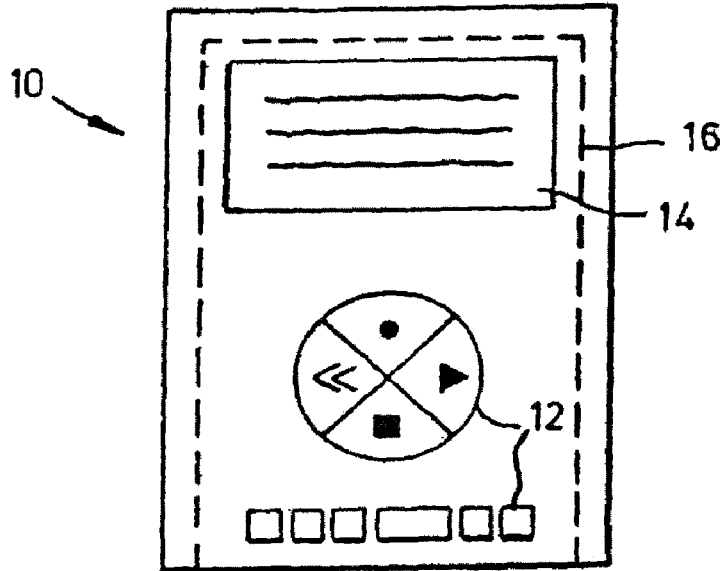
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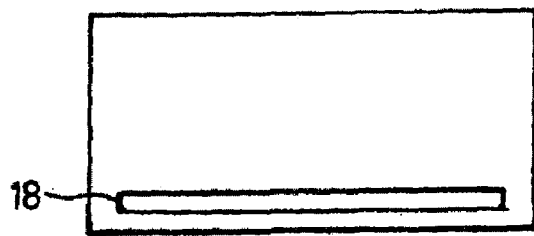
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Fig. 1

A



B



C

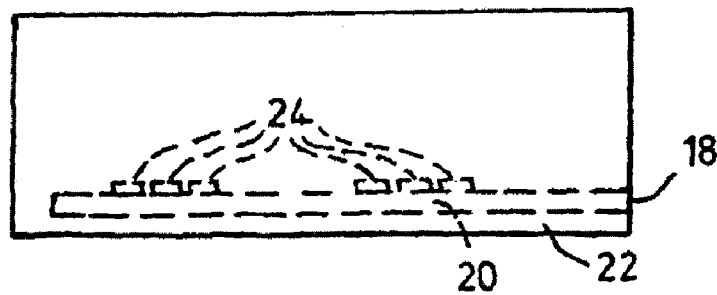


Fig. 2

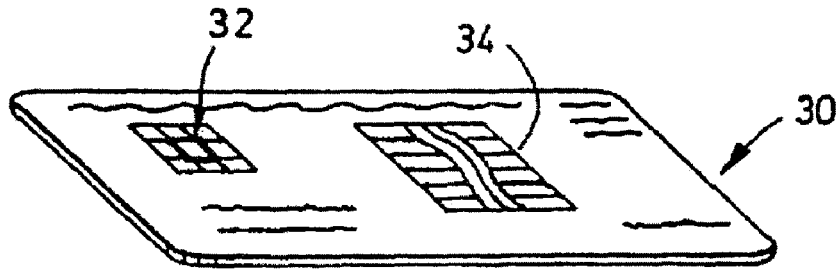


Fig. 3

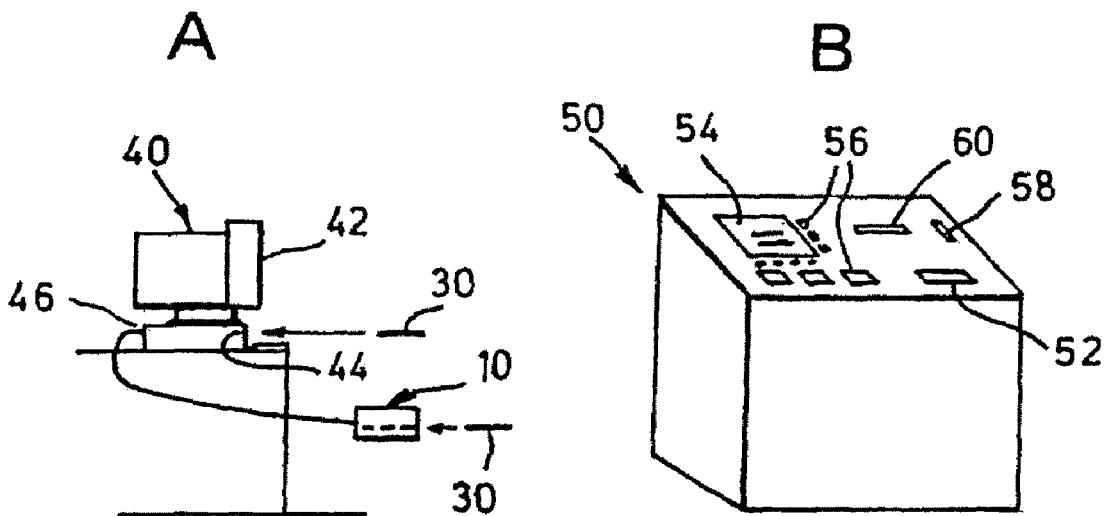
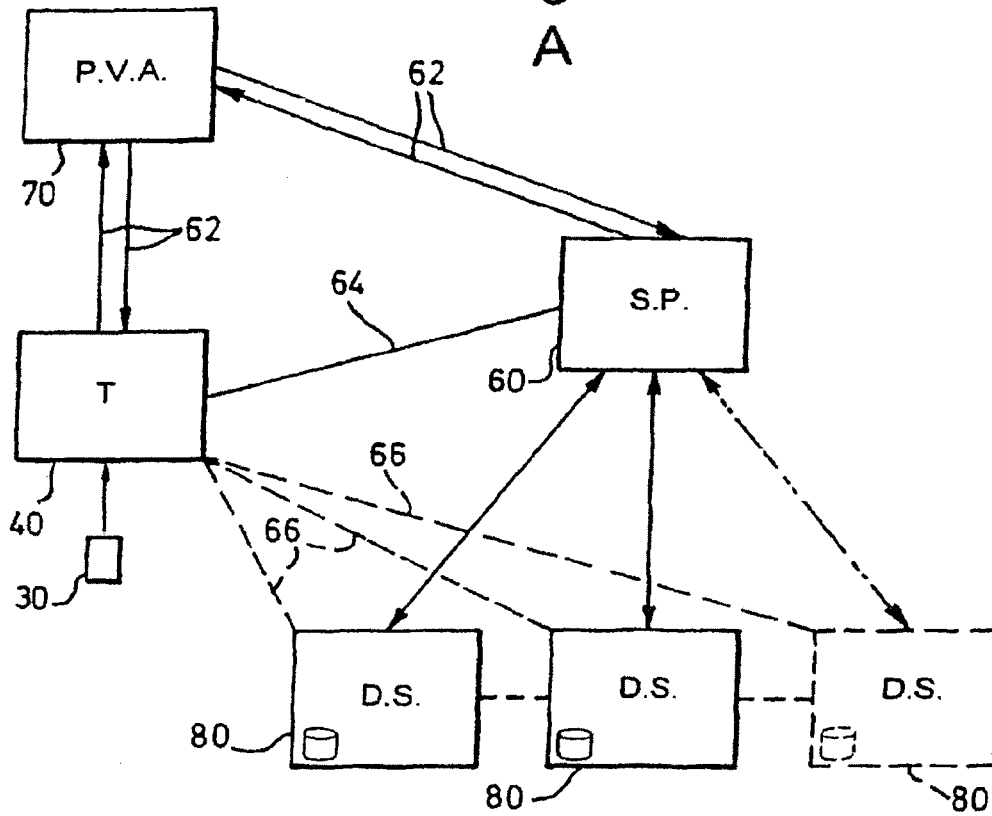
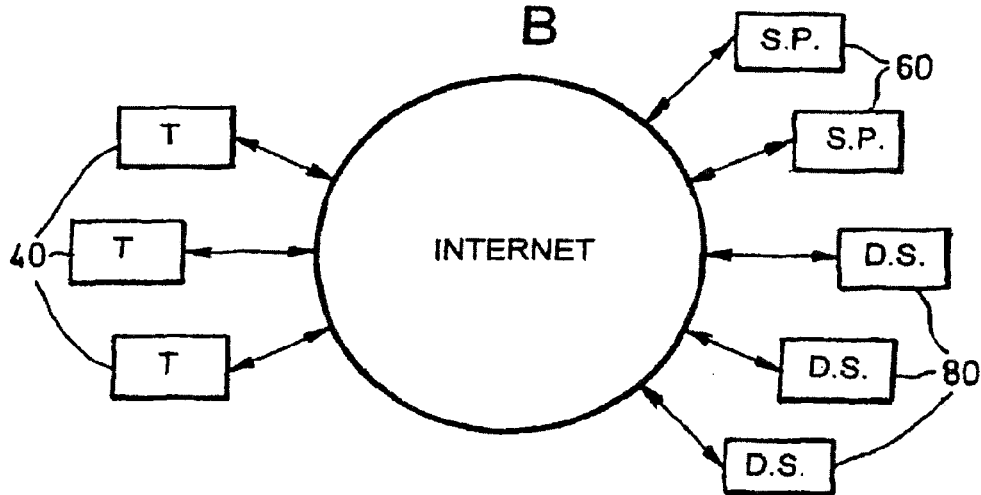


Fig. 4
A



B



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