



US008033458B2

(12) **United States Patent**  
**Hulst et al.**

(10) **Patent No.:** **US 8,033,458 B2**  
(45) **Date of Patent:** **Oct. 11, 2011**

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

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(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 0 days.

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(21) Appl. No.: **12/943,847**

(Continued)

(22) Filed: **Nov. 10, 2010**

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(65) **Prior Publication Data**

EP 0 195 098 10/1990

US 2011/0073643 A1 Mar. 31, 2011

(Continued)

**Related U.S. Application Data**

*Primary Examiner* — Thien M Le

(63) Continuation of application No. 12/014,558, filed on  
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.

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Stockton LLP

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

(57) **ABSTRACT**

(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.

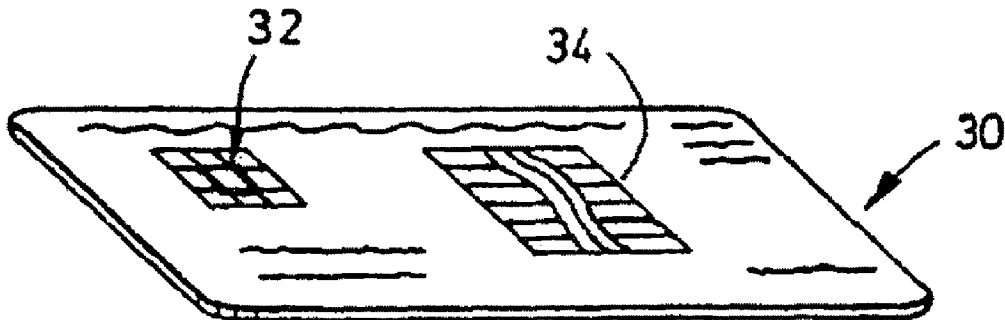
Data storage and access systems enable downloading and  
paying for data such as audio and video data, text, software,  
games and other types of data. A portable data carrier has an  
interface for sending and receiving data, data memory for  
storing received content data, and payment validation  
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.

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**12 Claims, 17 Drawing Sheets**



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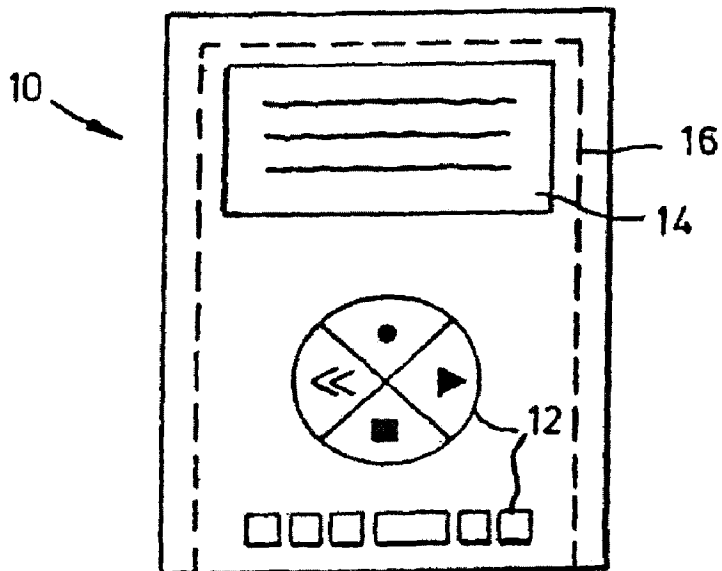
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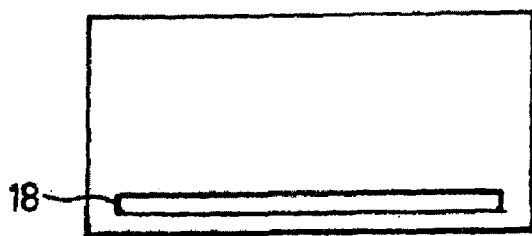
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Fig. 1  
A



B



C

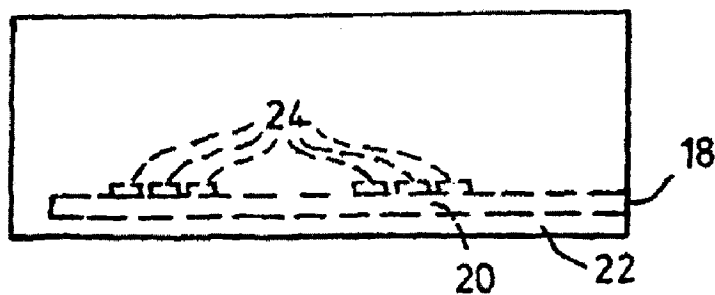


Fig. 2

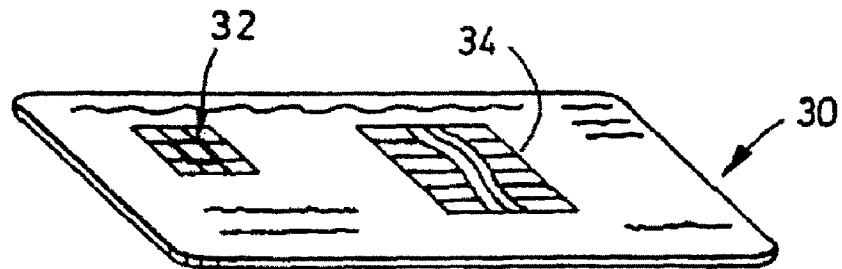


Fig. 3

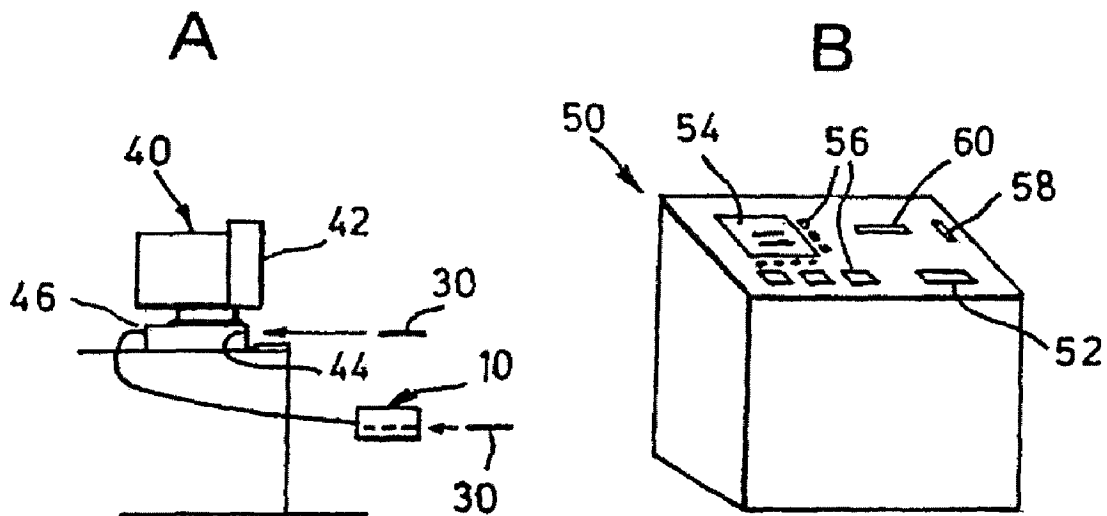
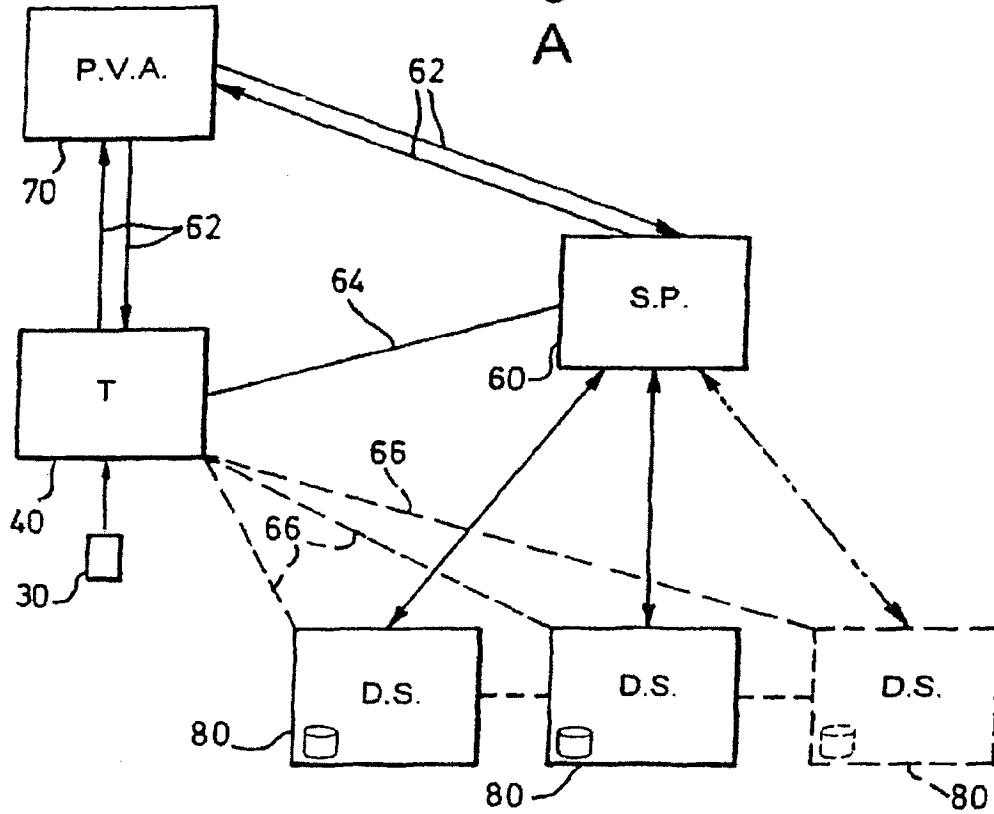
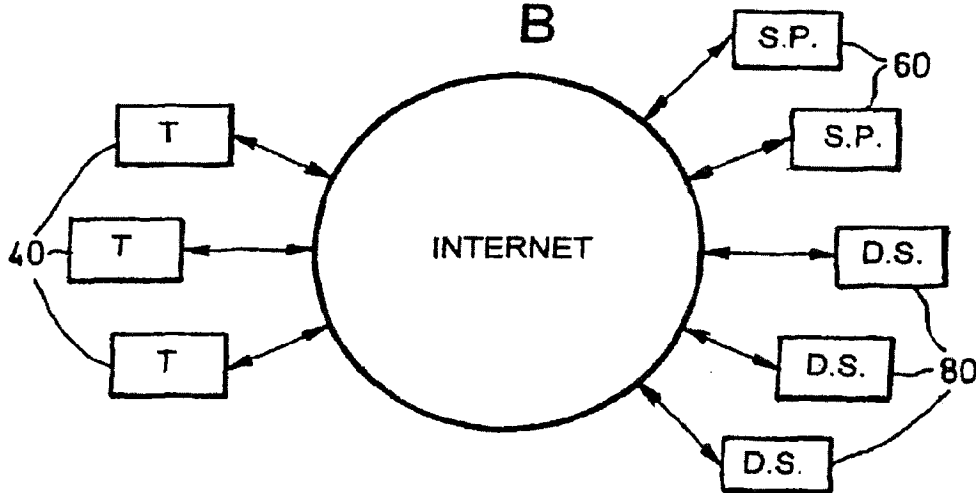


Fig. 4  
A



B



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