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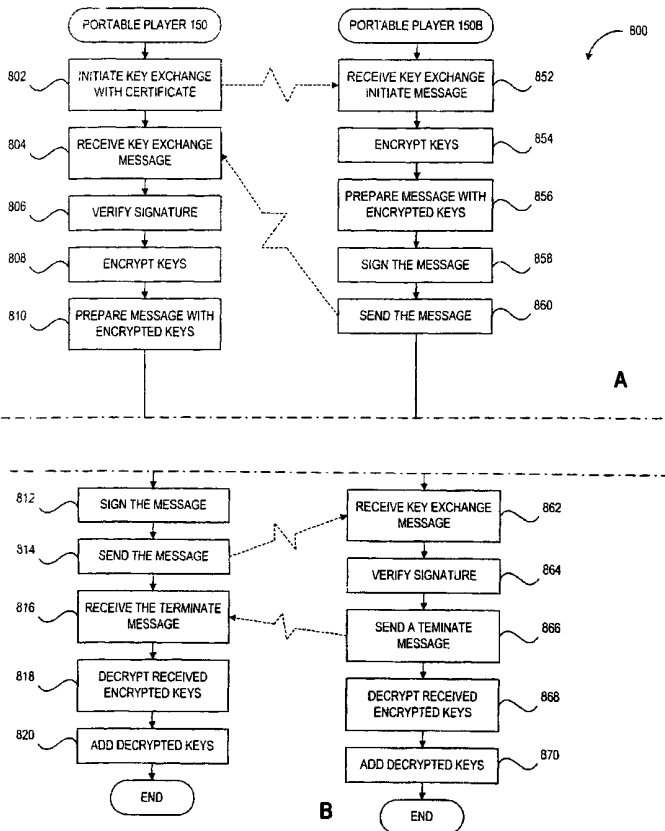
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(54) Title: COPY SECURITY FOR PORTABLE MUSIC PLAYERS



(57) Abstract: Data such as a musical track is stored as a secure portable track (SPT) which can be bound to one or more players and can be bound to a particular storage medium, restricting playback of the SPT to the specific players and ensuring that playback is only from the original storage medium. The SPT is bound to a player by encrypting data of the SPT using a storage key which is unique to the player, is difficult to change, and is held in strict secrecy by the player. The SPT is bound to a particular storage medium by including data uniquely identifying the storage medium in a tamper-resistant form, e.g., cryptographically signed. The SPT can also be bound to the storage medium by embedding cryptographic logic circuitry, e.g., integrate circuitry, in the packaging of the storage medium. The SPT is bound by encrypting an encryption key using the embedded logic. By using unique cryptographic logic, only that particular storage medium can decrypt the encryption key and, therefore, the data of the SPT encrypted with the encryption key. To allow a user to playback the SPT on a number of players, players can share storage keys with one another. Such key sharing is done in a cryptographically secure manner. Before downloading an SPT to a particular external player, the ability of the external player to enforce restrictions placed upon the SPT is verified.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
G11B20/00,H04L12/22,H04L9/32,G06F12/14

According to International Patent Classification (IPC) or to both national classification and IPC⁷

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
G11B,G06F,H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97/44736 A1 (APPLE COMPUTER, INC.) 27 November 1997, abstract, fig. 1, page 2, line 35 - page 3, line 5, claims.	1, 6, 8-13, 15-22
X	--	
X	EP 0756279 A2 (SONY CORPORATION) 29 January 1997, abstract, fig. 16, column 2, lines 13-24, 33-40, claims 1,4,5,8,11.	1, 6, 8-11, 13,15- 22
X	--	
X	US 5857021 A (KATAOKA et al.) 05 January 1999, abstract, fig. 3,4,9,11,13, column 1, line 58 - column 2,	1, 6, 10, 11, 21, 22

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	line 39, claims. -- US 5661799 A (NAGEL et al.) 26 August 1997, abstract, column 2, line 18 - column 3, line 33, claims. ----	1, 6, 9

ANHANG

Zum internationalen Recherchenbericht über die internationale Patentanmeldung Nr.

In diesem Anhang sind die Mitglieder der Patentfamilien der im obengenannten internationalen Recherchenbericht angeführten Patentdokumente angegeben. Diese Angaben dienen nur zur Unterrichtung und erfolgen ohne Gewähr.

ANNEX

To the International Search Report to the international Patent Application No.

PCT/US 00/08118 SAE 277741

This annex lists the patent family members relating to the patent documents cited in the above-mentioned search report. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

ANNEXE

Au rapport de recherche international relatif à la demande de brevet international n°

La présente annexe indique les membres de la famille de brevets relatifs aux documents de brevets cités dans le rapport de recherche international visée ci-dessus. Les renseignements fournis sont donnés à titre indicatif et n'engagent pas la responsabilité de l' Office.

Im Recherchenbericht angeführte Patentdokumente Patent document cited in search report Document de brevet cité dans le rapport de recherche	Datum der Veröffentlichung Publication date Date de publication	Mitglied(er) der Patentfamilie Patent family member(s) Membre(s) de la famille de brevets	Datum der Veröffentlichung Publication date Date de publication
WO A1 9744736	27-11-1997	AU A1 32063/97	09-12-1997
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