

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent of: Racz et al. Attorney Docket No.: 39843-0006CP2  
U.S. Patent No.: 8,061,598  
Issue Date: November 22, 2011  
Appl. Serial No.: 13/012,541  
Filing Date: January 24, 2011  
Title: DATA STORAGE AND ACCESS SYSTEMS

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**PETITION FOR *COVERED BUSINESS METHOD* PATENT REVIEW OF**  
**UNITED STATES PATENT NO. 8,061,598 PURSUANT TO 35 U.S.C. § 321**  
**AND § 18 OF THE LEAHY-SMITH AMERICA INVENTS ACT**

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## EXHIBITS

SAMSUNG 1001	U.S. Patent No. 8,061,598
SAMSUNG 1002	File history of U.S. Patent No. 8,061,598
SAMSUNG 1003	Declaration of Dr. Jeffrey Bloom (“Bloom”)
SAMSUNG 1004	RESERVED
SAMSUNG 1005	RESERVED
SAMSUNG 1006	RESERVED
SAMSUNG 1007	PCT Application PCT/GB00/04110 (“the ‘110 Appln.” or “‘110”), which is the application as filed for U.S. Patent Application No. 11/336,758 (“the ‘758 Appln.” or “‘758”) and U.S. Patent Application No. 10/111,716 (“the ‘716 Appln.” or “‘716”)
SAMSUNG 1008	United Kingdom Patent Application GB9925227.2 (“the ‘227.2 Appln.” or “‘227.2”)
SAMSUNG 1009	Transitional Program for Covered Business Method Patents—Definitions of Covered Business Method Patent and Technological Invention, 77 Fed. Reg. 157 (August 14, 2012)
SAMSUNG 1010	A Guide to the Legislative History of the America Invents Act; Part II of II, 21 Fed. Cir. Bar J. No. 4
SAMSUNG 1011	Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of <i>Bilski v. Kappos</i> (July 27, 2010)
SAMSUNG 1012	<i>Apple Inc. v. Sightsound Technologies, LLC</i> , CBM2013-00019 Paper No. 17 (entered October 8, 2013) at 11-13

SAMSUNG 1013	Volusion, Inc. v. Versata Software, Inc. and Versata Development Group, Inc., CBM2013-00017 Paper No. 8 (entered October 24, 2013)
SAMSUNG 1014	Salesforce.com, Inc. v. VirtualAgility, Inc., CBM2013-00024 Paper No. 16 (entered November 19, 2013)
SAMSUNG 1015	RESERVED
SAMSUNG 1016	RESERVED
SAMSUNG 1017	RESERVED
SAMSUNG 1018	RESERVED
SAMSUNG 1019	U.S. Patent No. 7,942,317 (“the ‘317 Patent” or “‘317”)
SAMSUNG 1020	U.S. Patent Application No. 12/014,558 (“the ‘558 Appln.” or “‘558”)
SAMSUNG 1021	U.S. Patent No. 7,334,720 (“the ‘720 Patent” or “‘720”)
SAMSUNG 1022	RESERVED
SAMSUNG 1023	U.S. Patent No. 5,915,019 (“Ginter”)
SAMSUNG 1024	RESERVED
SAMSUNG 1025	U.S. Patent Application No. 13/012,541 (“the ‘541 Appln.” or “‘541”)
SAMSUNG 1026	RESERVED
SAMSUNG-1027	RESERVED
SAMSUNG-1028	RESERVED
SAMSUNG-1029	RESERVED
SAMSUNG-1030	RESERVED
SAMSUNG-1031	RESERVED
SAMSUNG-1032	RESERVED
SAMSUNG-1033	RESERVED

SAMSUNG-1034	RESERVED
SAMSUNG-1035	RESERVED
SAMSUNG-1035	RESERVED
SAMSUNG-1036	RESERVED
SAMSUNG-1037	RESERVED
SAMSUNG-1038	RESERVED

Three sister companies, Samsung Electronics America, Inc., Samsung Electronics Co., Ltd., and Samsung Telecommunications America, LLC (“Petitioner” or “Samsung”) petition for *Covered Business Method Patent Review* (“CBM”) under 35 U.S.C. §§ 321 and § 18 of the Leahy-Smith American Invents Act of claim 7 (“the Challenged Claim”) of U.S. Patent No. 8,061,598. As explained in this petition, there exists a reasonable likelihood that Samsung will prevail in demonstrating unpatentability with respect to at least one of the Challenged Claim based on teachings set forth in at least the references presented in this petition. Samsung respectfully submits that a CBM should be instituted, and that the Challenged Claim should be canceled as unpatentable.

**I. MANDATORY NOTICES UNDER 37 C.F.R. § 42.8(a)(1)**

**A. Real Party-In-Interest Under 37 C.F.R. § 42.8(b)(1)**

Samsung Electronics America, Inc., Samsung Electronics Co., Ltd., and Samsung Telecommunications America, LLC are jointly filing this Petition, and are the real parties-in-interest.

**B. Related Matters Under 37 C.F.R. § 42.8(b)(2)**

Samsung is not aware of any disclaimers or reexamination certificates for the ‘598 Patent. The ‘598 Patent is the subject of a number of civil actions including: Smartflash LLC et al. v. Apple, Inc., Case No. 6:13-cv-00447 and Smartflash et al v. Samsung Electronics Co. Ltd. et al, Case No. 6:13-cv-00448. It is also the subject of the following Petitions for Covered Business Method Review: Apple

Inc. v. Smartflash LLC, CBM2014-00108 and CBM2014-00109. Petitioner is concurrently petitioning, in another petition assigned attorney docket number 39843-0006CP1, for CBM review of the '598 Patent under grounds additional to those presented in this petition.

**C. Lead And Back-Up Counsel Under 37 C.F.R. § 42.8(b)(3)**

Samsung designates W. Karl Renner, Reg. No. 41,265, as Lead Counsel and Thomas Rozylowicz, Reg. No. 50,620, as Backup Counsel, both available for service at 3200 RBC Plaza, 60 South Sixth Street, Minneapolis, MN 55402(T: 202-783-5070) or via electronic service by email at CBM39843-0006CP2@fr.com.

**II. PAYMENT OF FEES**

Samsung authorizes charges to Deposit Account No. 06-1050 for the fee set in 37 C.F.R. § 42.15(b) for this Petition and any related additional fees.

**III. REQUIREMENTS FOR CBM UNDER 37 C.F.R. § 42.304**

**A. Grounds for Standing Under 37 C.F.R. § 42.304(a)**

Samsung certifies that the '598 Patent is eligible for CBM. Samsung is not barred or estopped from requesting this review challenging the Challenged Claim on the below-identified grounds.

**B. Challenge Under 37 § 42.304(b) and Relief Requested**

Samsung requests a CBM review of the Challenged Claim on the grounds set forth in the table shown below, and requests that each of the Challenged Claim be found unpatentable. An explanation of how these claims are unpatentable under

the statutory grounds identified below is provided in the form of detailed description that follows, indicating where each claim elements can be found in the cited prior art, and the relevance of that prior art. Additional explanation and support for each ground of rejection is set forth in Exhibit SAMSUNG-1003, the Declaration of Dr. Jeffrey Bloom (“Bloom”), referenced throughout this Petition.

Ground	‘598 Patent Claims	Basis for Rejection
Ground 1	7	§ 102: Ginter

The ‘598 Patent issued Nov. 22, 2011 from the ‘541 Appln. (SAMSUNG 1025), which was filed on Jan. 24, 2011. The ‘541 appln is a continuation of the ‘558 Appln. (SAMSUNG 1020), which was filed Jan. 15, 2008 (now US Patent No. 7,942,317, SAMSUNG-1019), which is a continuation of the ‘758 Appln. (SAMSUNG 1007) filed Jan. 19, 2006 (now US Patent No. 7,334,720, SAMSUNG-1021), which is a continuation of the ‘716 Appln. (SAMSUNG-1007) filed Sep. 17, 2002 (now abandoned), which is a National Stage Entry of the ‘110 Appln. (SAMSUNG-1007) filed Oct. 25, 2000.<sup>1</sup>

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<sup>1</sup> The ‘110 Appln. claims priority to the ‘227.2 Appln. (SAMSUNG-1008), which was filed Oct. 25, 1999. However, because the ‘227.2 disclosure fails to support



Ginter (SAMSUNG-1004) qualifies as prior art under 35 U.S.C. § 102(b).

Specifically, Ginter issued June 22, 1999, more than one year before the earliest effective filing date of the Challenged Claim. Accordingly, Ginter is eligible under AIA § 18(a)(1)(C) as prior art for CBM review of the ‘598 Patent.

**C. Claim Construction under 37 C.F.R. §§ 42.304(b)(3)**

A claim subject to CBM review is given its “broadest reasonable construction in light of the specification of the patent in which it appears.” 37 C.F.R. § 42.100(b). Thus the words of the claim are given their plain meaning unless that meaning is inconsistent with the specification. In re Zletz, 893 F.2d 319, 321 (Fed. Cir. 1989). Petitioner submits, for the purposes of the CBM only, that the claim terms are presumed to take on their broadest reasonable interpretation in view of the specification of the ‘598 Patent.<sup>2</sup>

**1. CONSTRUCTION 1 – Payment data**

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the Challenged Claim, the effective filing date of the Challenged Claim is no earlier than Oct. 25, 2000.

<sup>2</sup> Because the standards of claim interpretation applied in litigation differ from PTO proceedings, any interpretation of claim terms in this CBM is not binding upon Petitioner in any litigation related to the subject patent. See In re Zletz, 893 F.2d 319, 321-22 (Fed. Cir. 1989).

For purposes of this CBM review, “payment data” should be construed to include and be met by data that relates to previous, present, and/or prospective payment.

Claims 7, 11, 12, and 17 of the ‘598 Patent each recite the term “payment data.” Claim 7 of the ‘598 Patent, for example, recites the following - “payment data memory to store payment data and code to provide the payment data to a payment validation system.” A POSITA<sup>3</sup> would understand that, as used in claims 7, 11, 12, and 17, the term “payment data” indicates and is met by data that relates to previous, present, and/or prospective payment. Bloom at, e.g., ¶ 28. (SAMSUNG 1003)

This interpretation is consistent with the relevant disclosure in the specification of the ‘598 Patent. Bloom at, e.g., ¶ 28. The ‘598 Patent describes, e.g., “[d]ata storage and access systems . . . for downloading and paying for data,” including a payment validation system that “validate[s] payment with an external authority such as a bank or building society,” such that “[t]he combination of the payment validation means with the data storage means allows the access to the downloaded data which is to be stored by the data storage means, to be made con-

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<sup>3</sup> The term “POSITA”, as used in this Petition, refers to a Person of Ordinary Skill In the Art at the ‘598 Patent’s effective filing date.

ditional upon checked and validated payment being made for the data.” ‘598 at Abstract, 2:8-15. The ‘598 Patent’s description of making access to downloaded content data conditional upon checked and validated payment being made indicates that “payment data” may relate previous, present, and/or prospective payment. Bloom at, e.g., ¶ 28. The ‘598 Patent also states, e.g., in the Abstract, that “[d]ata storage and access systems are described for downloading a paying for data such as audio and video data, text, software, games, and other types of data” – further supporting that “payment data”, as used in the claims of the ‘598 Patent, can relate to present payment. See also ‘598 at 4:50-61 (“the portable data carrier further comprises a program store for storing code . . . wherein the code comprises code to output payment data from the payment data memory”), 3:49-64, 4:36-38. In yet another example, the ‘598 Patent states that “[t]he carrier may also store content use rules pertaining to allowed use of stored data items,” and that “these use rules may be linked to payments made from [a] card . . .” – further supporting that “payment data”, as used in the claims of the ‘598 Patent, can relate to previous payment. ‘598 at 4:67-5:8; see also 5:4-11, 5:17-20.

As such, the disclosure in the specification of the ‘598 Patent is consistent with the term “payment data,” as used in claims 7, 11, 12, and 17, as it would be understood by a POSITA: data that relates to previous, present, and/or prospective payment. Bloom at, e.g., ¶ 28. Thus, for purposes of this proceeding, “payment

data” should be construed to include and be met by data that relates to previous, present, and/or prospective payment.

**D. The ‘598 Patent is a Covered Business Method Patent**

The ‘598 Patent, which generally relates to systems and methods “for downloading and paying for data” is a “covered business method patent” (“CBM patent”) as defined under § 18 of the AIA and 37 C.F.R. § 42.301. ‘598 at Abstract.

The AIA defines a CBM patent as “a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service” (emphases added). AIA § 18(d)(1); see also 37 C.F.R. § 42.301. The AIA’s legislative history demonstrates that the term “financial product or service” should be “interpreted broadly,” encompassing patents “claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity.” SAMSUNG-1010 at 48735 (*quoting* 157 Cong. Rec. S5432 (daily ed. Sept. 8, 2011) (statement of Sen. Schumer)). Moreover, as the *Guide to the Legislative History of the America Invents Act* indicates, the language “practice, administration, or management” is “intended to cover any ancillary activities related to a financial product or service, including . . . marketing, customer interfaces [and] management of data . . .” (emphases added). SAMSUNG-1010 at 635-36.

Augmenting the statutory language with the above-referenced clarifications from the legislative history, and from the *Guide* to that legislative history, yields the following definition of a CBM patent: a patent that claims a method or corresponding apparatus for performing data processing or other operations used in activities that are financial in nature, incidental to a financial activity, or complementary to a financial activity, including the management of data. See AIA § 18(d)(1); SAMSUNG-1009 at 48735; and SAMSUNG-1010 at 635-26.

In the words of the Patent Owner, the claims of the ‘598 Patent are directed to a “portable data carrier” for “storing and paying for data.” See ‘598 at 1:21-23. Claim 7 of the ‘598 Patent, for example, recites a “portable data carrier,” that includes “payment data memory to store payment and code to provide the payment data to a payment validation system.”

As an example, the purported data carrier and payment validation system of claim 7 unquestionably are used for data processing in the practice, administration, and management of financial products and services; specifically, for processing payments for data downloads. Bloom at, e.g., ¶ 23. Indeed, in a recent decision involving highly similar claims, the Board determined that selling a desired digital audio signal to a user constitutes financial activity. See SAMSUNG-1014 at 11-13 (“The cited entities may not provide typical financial services, but . . . they do sell digital content, which is the financial activity recited in claim 1”).

The specification of the ‘598 Patent, moreover, is replete with examples of financial activity, stating that payment data forwarded to a payment validation system may be “data relating to an actual payment made to the data supplier, or . . . a record of a payment made to an e-payment system” that can be “coupled to banks.” See ‘598 at 6:60-64, 13:36-41. Even if claim 7 did not explicitly reference financial activity, and it does, this description alone would be sufficient to establish that the claimed method is a method for performing data processing used in the practice, administration, or management of a financial product or service and that, therefore, the ‘598 Patent is a CBM patent. See SAMSUNG-1014 at 5, 6 (determining, based on a specification statement that ‘embodiments of the present invention have application to a wide range of industries’ including ‘financial services,’ despite the apparent lack of financial-related language in the claims); see also SAMSUNG-1013 at 9-15 (“Although claim 8 does not expressly refer to financial activity . . . When applied to the activities listed [in the patent’s specification] . . . the method of claim 8 represents a financial product or service”).

Thus, for at least the reasons described above, the ‘598 Patent is a CBM patent that is eligible for the review requested by Petitioner.

**E. The ‘598 Patent Is Not Directed to a Technological Invention, And Thus, Should Not Be Excluded From the Definition of a CBM Patent.**

The AIA excludes “patents for technological inventions” from the definition of CBM patents. AIA § 18(d)(2). To determine when a patent covers a technological invention, “the following will be considered on a case-by-case basis: whether the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art; and solves a technical problem using a technical solution.” 37 C.F.R. § 42.301 (emphasis added); see also SAMSUNG-1009 at 48736-37 (USPTO clarified that to qualify as a technological invention, a patent must have a novel, unobvious technological feature and a technical problem solved by a technical solution). “[A]bstract business concepts and their implementation, whether in computers or otherwise,” are not included in the definition of “technological inventions.” SAMSUNG-1010 at 634. Indeed, Congress has explained that accomplishing a business process or method is not technological, whether or not that process or method is novel. See id. Finally, to institute a CBM, a patent need only have one claim directed to a covered business method, and not a technological invention. See, e.g., SAMSUNG-1009 at 48736-37.

The claims of the ‘598 Patent fail to recite a novel and unobvious technological feature, and fail to recite a technical problem solved by a technical solution. See Bloom at, e.g., ¶ 23. Thus, the patent is subject to Section 18 review. Although the independent claims of the ‘598 Patent recite computer-related terms such as “non-volatile memory”, “data terminal”, and “data carrier”, Congress has

explained that simply reciting words describing generic technology such as “computer hardware, . . . software, memory, computer-readable storage medium, [or] databases” does not make a patent a technological invention. SAMSUNG-1010 at 634.

The specification of the ‘598 Patent confirms that the computer-related terms recited in the ‘598 Patent’s claims relate to technology that is merely, in the words of the Patent Owner, “conventional”: the specification states, for example, that “[t]he data access terminal may be a conventional computer or, alternatively, it may be a mobile phone” that terminal memory “can comprise any *conventional* storage device,” and that a “data access device . . . such as a portable audio/video player . . . comprises a *conventional* dedicated computer system including a processor . . . program memory . . . and timing and control logic . . . coupled by a data and communications bus.” ‘598 at 4:4-5, 16:46-53, 18:7-11. Consequently, the ‘598 Patent claim is not transformed into a technological invention by their recitation of these computer-related terms.

The ‘598 Patent fails even to recite a technical problem, and instead addresses the non-technical task of allowing “owners of . . . data to make the data available themselves over the internet without fear of loss of revenue . . . undermining the position of data pirates.” ‘598 at 2:11-15, 5:17-19. The ‘598 Patent’s solution to this non-technical problem is nothing more the combination of prior art struc-



tures to achieve a normal, expected, and predictable result: the use of a data supply system, content provision system, data terminal and data carrier to restrict access to data based on payment. See, e.g., ‘598 at Abstract, 13:25-34. A teaching of a combination of prior art structures that achieves a predictable result does not “render a patent a technological invention.” SAMSUNG-1009 at 48755. Indeed, “[a] person having ordinary skill in the art at the time that the ‘598 Patent was filed would not have considered the methods described and claimed by the ‘598 Patent to be technical”. Bloom at, e.g., ¶¶ 23, 24.

In sum, the AIA’s exclusion of “patents for technological inventions” from the definition of CBM patents is not applicable here because the ‘598 Patent fails to recite a novel and unobvious technological feature, and fails to recite a technical problem solved by a technical solution. CBM review is therefore appropriate for the ‘598 Patent.

#### **IV. SUMMARY OF THE ‘598 Patent**

##### **A. Brief Description**

The ‘598 Patent includes 41 claims, of which claims 1, 18, 21, 26, 27, 29, 31 and 35 are independent.

The claims of the ‘598 Patent generally relate to systems and methods “for downloading and paying for data such as audio and video data, text, software, [and] games . . . .” ‘598 at Abstract. The ‘598 Patent purports to address a specific

problem: “the growing prevalence of so-called data pirates” who “obtain data either by unauthorized or legitimate means and then make this data available essentially world-wide over the internet without authorization.” ‘598 at 1:31-33. Within this context, the ‘598 Patent describes “combining digital right management with content data storage,” and states that “[b]inding the data access and payment together allows the legitimate owners of the data to make the data available themselves over the internet without fear of loss of revenue, thus undermining the position of data pirates.” ‘598 at 2:7-11, 5:29-33.

Specifically, the ‘598 Patent also discloses a “portable data carrier for storing and paying for data.” ‘598 at 1:21-22. The portable data carrier stores, in a parameter memory, use rules that are used to control access to content data and, in a content memory, the portable data carrier stores content data. See ‘598 at Figs. 5-6, 13: 25-27. This disclosure is reflected in the limitations of independent claims 1 and 31, the latter of which recites “reading the use status data and one or more use rules from parameter memory ... evaluating the use status data using the one or more use rules to determine whether access to the content data item is permitted....” ‘598 at 28:22-27.

#### **B. Summary of the Prosecution History of the ‘598 Patent**

The ‘598 Patent issued Nov. 22, 2011 from the ‘541 Appln. (SAMSUNG 1025), which was filed on Jan. 24, 2011 with 41 claims.

During prosecution of the '541 Appln., a Non-Final Office Action rejected claims 1, 21, and 31-37 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 7,334,720. See Non-Final Office Action of April 14, 2011 at 3 and 7-8. Claims 9, 18, 23-30, 38-41 were rejected on the same double patenting ground over claims of the '720 patent in view of U.S. Patent No. 6,415,156 to Stademann. Id. Dependent claims 10, 12-14, and 19-20 were deemed to contain allowable subject matter. Id. Subsequently, the Patent Owner filed a Terminal Disclaimer (TD) without substantive amendments. See Patent Owner's Response May 20, 2011 at 9. After the Power of Attorney has been duly corrected, the Patent Office accepted the Terminal Disclaimer and mailed a Notice of Allowance to allow all pending claims, noting that "the prior art fails to disclose a portal data carrier comprising: (i) an interface for reading and writing data; (ii) a content data memory; (iii) a use rule memory; (iv) a program store; and having the functions and characteristics as recited in claim 1. The prior art also fails to disclose the limitations of claims 18, 21, 26, 27, 29, 31 and 35." See Notice of Allowance September 12, 2011 at 2. After allowance, formality errors in claims 26 and 29 were corrected. See Patent Owner's Amendment under Rule 312 Oct. 19, 2011.

**V. MANNER OF APPLYING CITED PRIOR ART TO EVERY CLAIM FOR WHICH A CBM IS REQUESTED, THUS ESTABLISHING A REASONABLE LIKELIHOOD THAT AT**

**LEAST ONE CLAIM OF THE ‘598 PATENT IS UNPATENTABLE**

Claim 7 is challenged. Claim 7 depends from claim 1 and, therefore, incorporates the subject matter of claim 1. As demonstrated below, claim 7 is anticipated by Ginter.

**A. GROUND 1 – Ginter Anticipates Claim 7.**

The features of claims 7 are anticipated by Ginter, rendering each of these claims unpatentable under 35 U.S.C. § 102(b).

**1. Overview of Ginter**

Ginter describes secure transaction management and electronic rights protection achieved through a virtual distribution environment (“VDE”) that controls, using payment and other information, access to electronically disseminated and stored content objects. Ginter at Abstract<sup>4</sup>; Bloom at, e.g., ¶ 29. In some imple-

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<sup>4</sup> Throughout this petition, citations are exemplary in nature and are not intended to be fully comprehensive of relevant subject matter throughout the subject reference, which is all incorporated into each citation. For instance, here, additional and relevant subject matter is found at Ginter 1:11-19 (“this invention relates to systems and techniques for secure transaction management. This invention also relates to computer-based and other electronic appliance-based technologies that help to ensure that information is accessed and/or otherwise used only in authorized

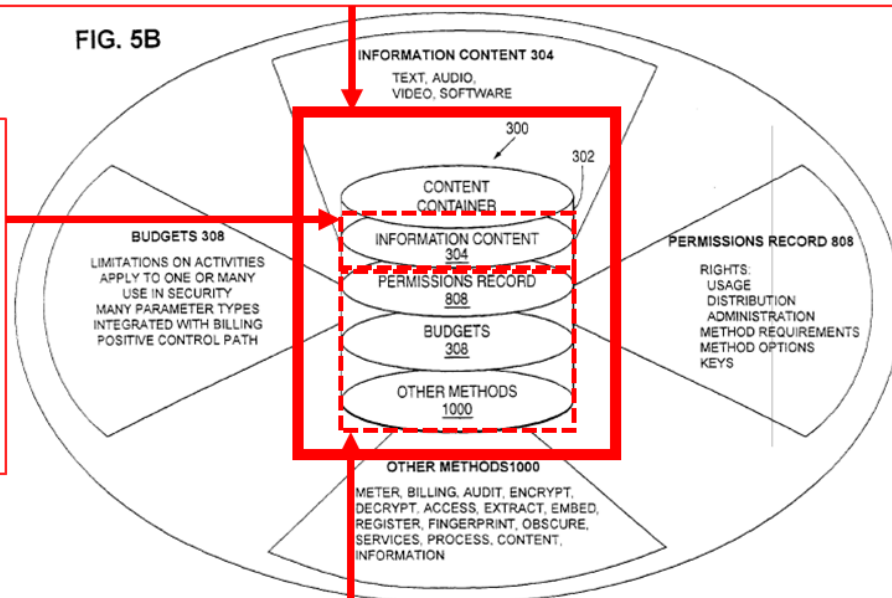
mentations, Ginter's content objects are delivered to end users in "containers," which, as depicted in the following annotated version of FIG. 5B, contain both information content (which may include, e.g., textual, audio, video, and/or software elements) and associated control information; in other implementations, Ginter's control information is delivered separately from the content with which it is associated. Ginter at 13:50-67, 43:24-30, 58:57-65; Bloom at, e.g., ¶ 29; see also FIG. 5B ann. (a),(b).

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ways, and maintains the integrity, availability, and/or confidentiality of such information and processes related to such use"), which is incorporated into the citation to Ginter, despite the absence of specific citation to that section.

(a): As FIG. 5B depicts, a content object (e.g., content object 300) may include both content (e.g., information content 304) and control information (e.g., budgets 308, permissions record 808, and other methods 1000) with which the content is associated; in some embodiments, control information may be delivered separately from the content with which it is associated. See, e.g., Ginter at 13:50-67.

(b): Information content 304 may include text, audio, video, software, and/or other kinds of information. See, e.g., Ginter at 58:57-65.



(c): Control information may, e.g., include: (i) permissions record 808, specifying, e.g., rights associated with content object 300; (ii) budgets 308, specifying, e.g., limitations on usage of information content 304 and how usage will be paid for; and (iii) other methods 1000, specifying, e.g., how usage of information content 304 will be metered, billed, and audited. See, e.g., Ginter at 58:66-59:35.

In either case, controls on access to and/or the use of information content may be enforced through budgeting, metering, and/or other methods that involve use status data and use rules. Ginter at 14:49-15:9; Bloom at, e.g., ¶ 30. Control information that is associated with one or more of these methods may, e.g., include: (i) permissions record 808, specifying, e.g., rights associated with content object 300; (ii) budgets 308, specifying, e.g., limitations on usage of information content 304 and how usage will be paid for; and (iii) other methods 1000, specify-

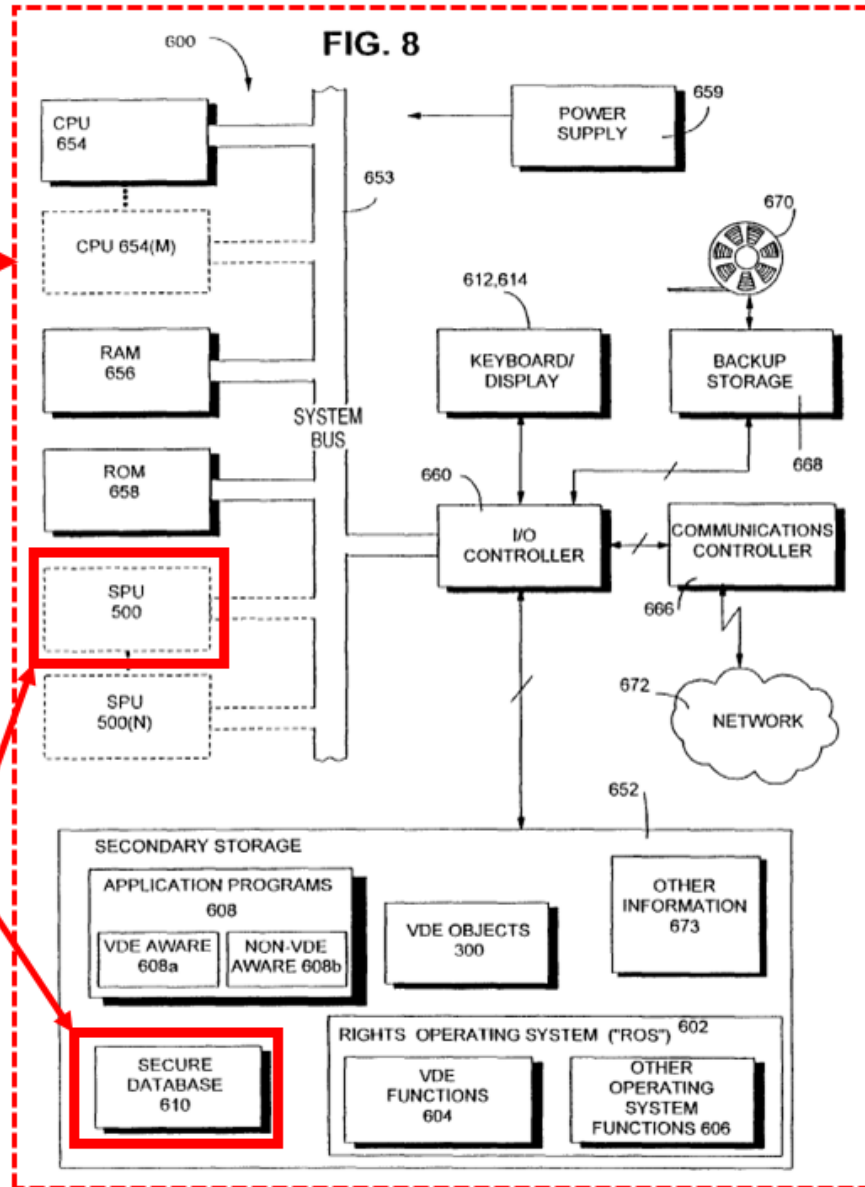
ing, e.g., how usage of information content 304 will be metered, billed, and audited. See Ginter at 58:66-59:35; Bloom at, e.g., ¶ 30; see also FIG. 5B ann. (c).

End users interface with Ginter's VDE through electronic appliances, which implement these methods to ensure that content is accessed and used only in authorized ways; an electronic appliance "may be practically any kind of electrical or electronic device," including, e.g., a personal computer or smart card. Ginter at Abstract, 60:19-30; Bloom at, e.g., ¶ 31; see also FIG. 8 ann. (a).

In the specific example depicted by annotated FIG. 8 below, the electronic appliance 600 features a Secure Processing Unit ("SPU") 500 that performs secure data management processes including "governing usage of, auditing of, and where appropriate, payment for VDE objects 300." Ginter at 63:27-41. Performance of these processes involves the use of control information (e.g., use status data and use rules) that is maintained in a secure database 610, which may be stored in non-volatile memory of the SPU itself; the control information may alternatively be stored in a secondary storage 652 that stores content objects 300 to which the control information pertains. Ginter at 63:27-41, 65:61-67 ("Stored in each SPU 500 and/or electronic appliance secondary memory 652 may be, e.g. . . . objects 300 . . . and management database 610 that stores both information associated with objects and VDE control information"); Bloom at, e.g., ¶ 32; see also FIG. 8 ann. (b).

(a): Electronic Appliance 600, which “may be practically any kind of electrical or electronic device,” may be used to ensure that content is accessed and used only in authorized ways. See, e.g., Ginter at Abstract, 60:19-30.

(b): As FIG.8 depicts, Secure Database 610 (and its control information, including, e.g., use status data and use rules) may be maintained in secondary storage 652; in other embodiments, Secure Database 610 may be maintained in non-volatile memory of SPU 500. See, e.g., Ginter at 63:27-41,65:61-67.



Ginter recognizes that its electronic appliances may be portable. Ginter at 228:37-38 (“Electronic appliance 600 provided by the present invention may be portable”). Indeed, Ginter contemplates smart card implementations in the form of portable electronic appliances that can dock with other electronic appliances, such as personal computers and merchant terminals. Ginter at 40:64-41:7 (“portable

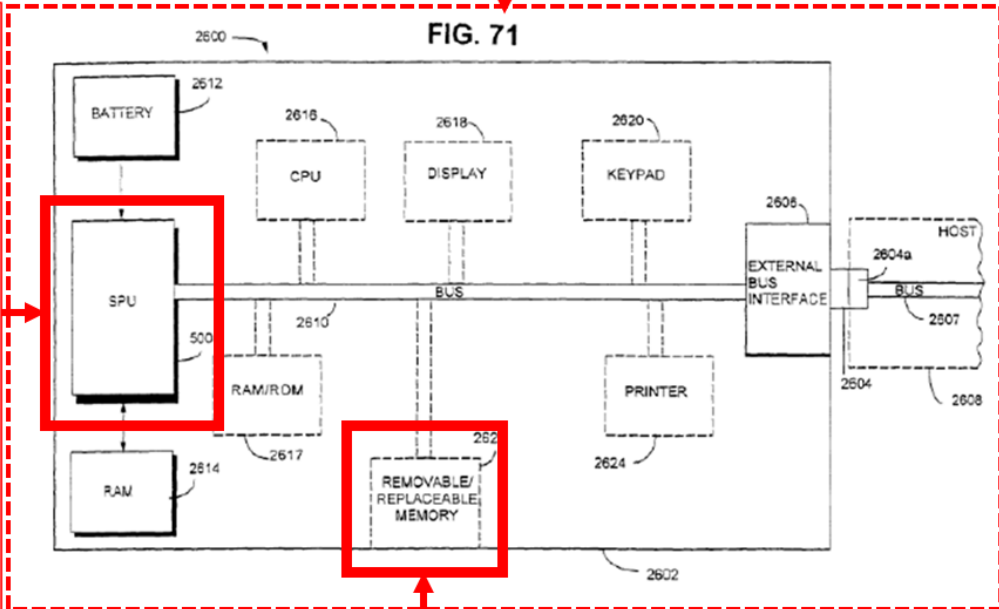


VDEs [may be used] as transaction cards at retail and other establishments, wherein such cards can 'dock' with an establishment terminal that has a VDE secure subsystem and/or an online connection to a VDE secure and/or otherwise secure and compatible subsystem, such as a 'trusted' financial clearinghouse (e.g., VISA, Mastercard)), 41:13-16 ("Such a card can be used for transaction activities of all sorts. A docking station, such as a PCMCIA connector on an electronic appliance, such as a personal computer, can receive a consumer's VDE card at home"); Bloom at, e.g., ¶ 33. When connected, a portable smart card electronic appliance and a terminal "can securely exchange information related to a transaction, with credit and/or electronic currency being transferred to a merchant and/or clearinghouse and transaction information flowing back to the card." Ginter at 41:7-12; Bloom at, e.g., ¶ 33.

With reference to FIG. 71, reproduced below with annotation, Ginter describes a specific example of a Portable Electronic Appliance ("PEA") 2600 that stores control information in a non-volatile memory of the PEA's SPU 500, in addition to content objects that are separately stored in another non-volatile memory, removable/replaceable memory 2622. See Ginter at 228:36-231:65; Bloom at, e.g., ¶ 34.

(a): Portable Electronic Appliance 2600 may, in some implementations, be used in combination with electronic appliance 600. See, e.g., Ginter at 230:20-42.

(b): SPU 500 includes a non-volatile memory that may store control information, including use status data and use rules, in a secure database 610. See, e.g., Ginter at 65:61-67.



(c): Removable/replaceable memory 2622 is yet another separate non-volatile memory that may serve as secondary storage for content objects that include content and, in some implementations but not in others, control information that is associated with content. See, e.g., Ginter at 13:50-67, 14:49-15:9, 65:61-67, 230:15-19, 229:18-34.

SPU 500 includes a non-volatile memory that may store control information, including use status data and use rules, in a secure database 610. See Ginter at 65:61-67; Bloom at, e.g., ¶ 35; see also FIG. 71 ann. (b). SPU 500 may, e.g., store audit information indicating user payments for VDE content objects, in addition to control information used to determine whether a user is authorized to access content objects. See, e.g., Ginter at 65:61-67 (“Stored in each SPU 500 . . . may be, e.g. . . . management database 610 that stores both information associated with ob-

jects and VDE control information”); Bloom at, e.g., ¶ 35; see also FIG. 71 ann.

(b).

Removable/replaceable memory 2622 is yet another separate non-volatile memory that may serve as secondary storage for content objects that include content and, in some implementations but not in others, control information that is associated with content. See Ginter at 13:50-67, 14:49-15:9, 230:15-19 (“Removable/replaceable memory 2622 may comprise a memory cartridge or memory medium such as a bulk storage device, for providing additional long-term or short-term storage”), 229:18-34 (“Portable appliance 2600 may, in one embodiment, comprise means to perform substantially all of the functions of a VDE electronic appliance 600. Thus, e.g., portable 20 appliance 2600 may include the means for storing and using permissions, methods, keys, programs, and/or other information, and can be capable of operating as a ‘stand alone’ VDE node”), 65:61-67 (“Stored in each electronic appliance secondary memory 652 may be, e.g. . . . objects 300 containing VDE controlled property content and related information”); Bloom at, e.g., ¶ 36; see also FIG. 71 ann. (c).

In some embodiments, the PEA is a device that is used by Ginter in combination with another electronic appliance 600 (e.g., a personal computer or other data terminal). See, e.g., Ginter at 230:20-42 (“portable appliance 2600 may have the

form factor of a ‘smart card’ [and] may be insertable into . . . a computer or other electronic appliance”), 40:64-41:16; Bloom at, e.g., ¶ 37; see also FIG. 71 ann. (a).

A user of the PEA or the user of another electronic appliance to which the PEA is coupled can browse a catalog of content objects stored locally or at a remote object repository and select a particular content object for purchase and/or downloading. Ginter at 289:27-35 (“the user may begin manipulating and directing their user interface software to browse through a repository content catalog 3322 (e.g. lists of publications, software, games, movies, etc.) . . . If a user is connecting to obtain content, the usage requirements for that content may be delivered to them”); Bloom at, e.g., ¶ 38. Payment for a selected content object, and the auditing of such a payment, may be made “through the use of prepayments, credits, real-time electronic debits from bank accounts and/or VDE node currency token deposit account.” Ginter at 63:34-41; Bloom at, e.g., ¶ 38.

Upon selection of a particular content object, the PEA or a coupled electronic appliance can transmit to a clearinghouse audit information reflecting a payment made for the selected object. See, e.g., Ginter at 41:7-12, 161:42-64 (“Once a secure connection is established, the end user's electronic appliance may determine . . . whether it has any administrative object(s) containing audit information that it is supposed to send to the clearinghouse . . . Audit information pertaining to several VDE objects 300 may be placed within the same administrative object for trans-

mission . . . the electronic appliance sends that administrative object to the clearinghouse”); Bloom at, e.g., ¶ 39.

After validating the audit information, the clearinghouse transmits an administrative response back to the PEA or electronic appliance. Ginter at 161:65-162:8 (“The clearinghouse may receive the administrative object and process its contents to determine whether the contents are ‘valid’ . . . [and] may, as a result of this analysis, may generate one or more responsive administrative objects that it then sends to the end user's electronic appliance 600”); Bloom at, e.g., ¶ 40. Subsequently, the selected VDE content object and accompanying control information is downloaded from the object repository and stored in memory of the PEA. See Ginter at 289:67-290:2 (“If the transaction is authorized . . . the container packager takes this package of control information and the content and forms an appropriate container . . . the container is transmitted across the network to the end user”), 161:42-162:6 (“The end user's electronic appliance 600 may process events that update its secure database 610 and/or SPU 500 contents based on the administrative object received”); Bloom at, e.g., ¶ 40.

Once downloaded to the PEA responsive to the validated user purchase, a content object stored in the PEA's removable/replaceable memory may be accessed responsive to a user request. Ginter at 230:48-59 (“Portable electronic appliance 2600 may . . . be used, e.g., to allow a consumer . . . to watch a movie that

the consumer had acquired a license to use, or perhaps to listen to an audio record on a large capacity optical disk that the consumer had licensed for unlimited plays”); 183:24-30 (“a user application may issue a request for access to a particular content stored within the VDE container”); Bloom at, e.g., ¶ 41. Providing access involves updating audit information stored in the PEA’s SPU. See Ginter at 48:65-49:14 (“SPUs provide a trusted environment for . . . securely accumulating and managing audit trail, reporting, and budget information in secure and/or non-secure non-volatile 10 memory, [and] maintaining a secure database of control information management instructions”), 136:7-19, 142:43-143:22; Bloom at, e.g., ¶ 41. This may involve, e.g., updating a meter method User Data Element (“meter method UDE”) that indicates usage of the content object, calculating a cost based on a cost per access of the content object stored in a billing Method Data Element (“billing MDE”) and then comparing the calculated cost with an aliased budget value stored in a budget method UDE to determine whether an access limit has been exceeded. See Ginter at 172:32-35, 185:57-59, 186:15-24, 264:62-265:16; Bloom at, e.g., ¶ 41.

If access is permitted, the content object is played or otherwise accessed for the user. See Ginter at 58:33-34; Bloom at, e.g., ¶ 42

## **2. Ginter Anticipates Claim 7.**

As noted above, claim 7 depends from claim 1 and, therefore, incorporates the limitations of claim 1, which is not challenged. Below, Petitioner provides a mapping of Ginter to the limitations of claims 1 and 7.

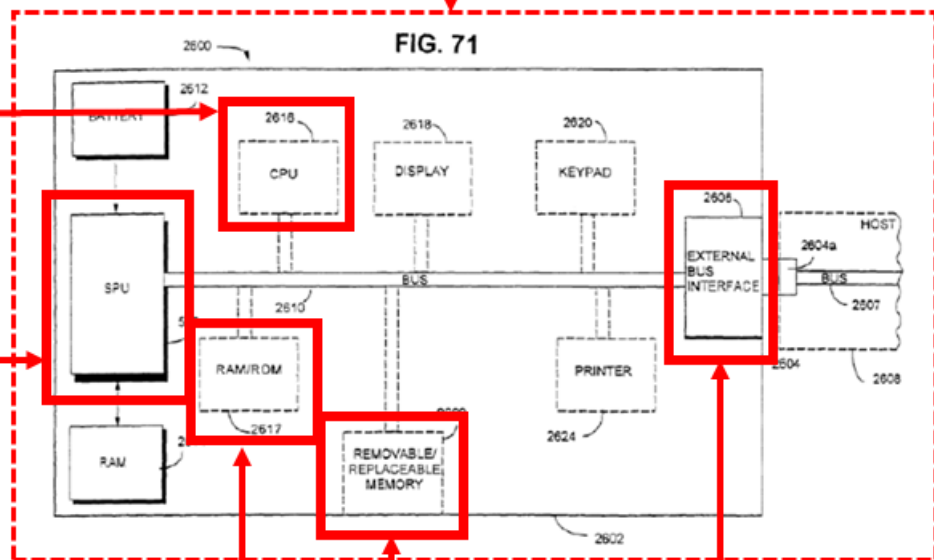
*1 (pre): A portable data carrier comprising:*

Ginter describes data carriers (e.g., electronic appliances) that may be portable. Ginter at 228:37-38 (“Electronic appliance 600 provided by the present invention may be portable”), FIGS 8 and 71. Indeed, Ginter contemplates smart card implementations in the form of portable electronic appliances that can dock with other electronic appliances, such as personal computers and merchant terminals. Ginter at 40:64-41:7. With reference to FIG. 71, Ginter describes a specific example of a Portable Electronic Appliance 2600 that stores use rules in addition to content data items. See FIG. 71 (depicting PEA 2600), 228:36-231:65, 229:18-34 (“Portable appliance 2600 may . . . comprise means to perform substantially all of the functions of a VDE electronic appliance 600”); Bloom at, e.g., ¶ 43; see also Ginter at 34:1-6, 100:50-55, 109:2-4, 229:18-20, 230:7-47.

1(e): CPU 2616 is a processor that is interconnected by Bus 2610 to SPU 500, ROM 2617, memory 2622, and interface 2606. See, e.g., Ginter at 65:42-51, 229:34-41.

1(c),(e): SPU 500 is a processor that stores use status data and use rules in a parameter memory, secure database 610. See Ginter 65:61-67. SPU 500 is interconnected by Bus 2610 to CPU 2616, ROM 2617, memory 2622, and interface 2606. See, e.g., Ginter at 65:42-51, 229:34-41.

1(pre): Portable Electronic Appliance 2600 may be implemented as a portable data carrier. See, e.g., Ginter at 230:20-47.



1(d): ROM 2617 is a program store storing code implementable by CPU 2616. See, e.g., Ginter at 60:49-62, 63:8-25.

1(b): memory 2622 is a content data memory that serves as secondary storage for content data items. See, e.g., Ginter at 230:15-19, 229:18-34, 65:61-67.

1 (a): External bus interface 2606 for reading and writing data from and to PEA 2600. See, e.g., Ginter at 41:13-16, 228:39-50, 230:20-42.

*1 (a) an interface for reading and writing data from and to the portable data carrier;*

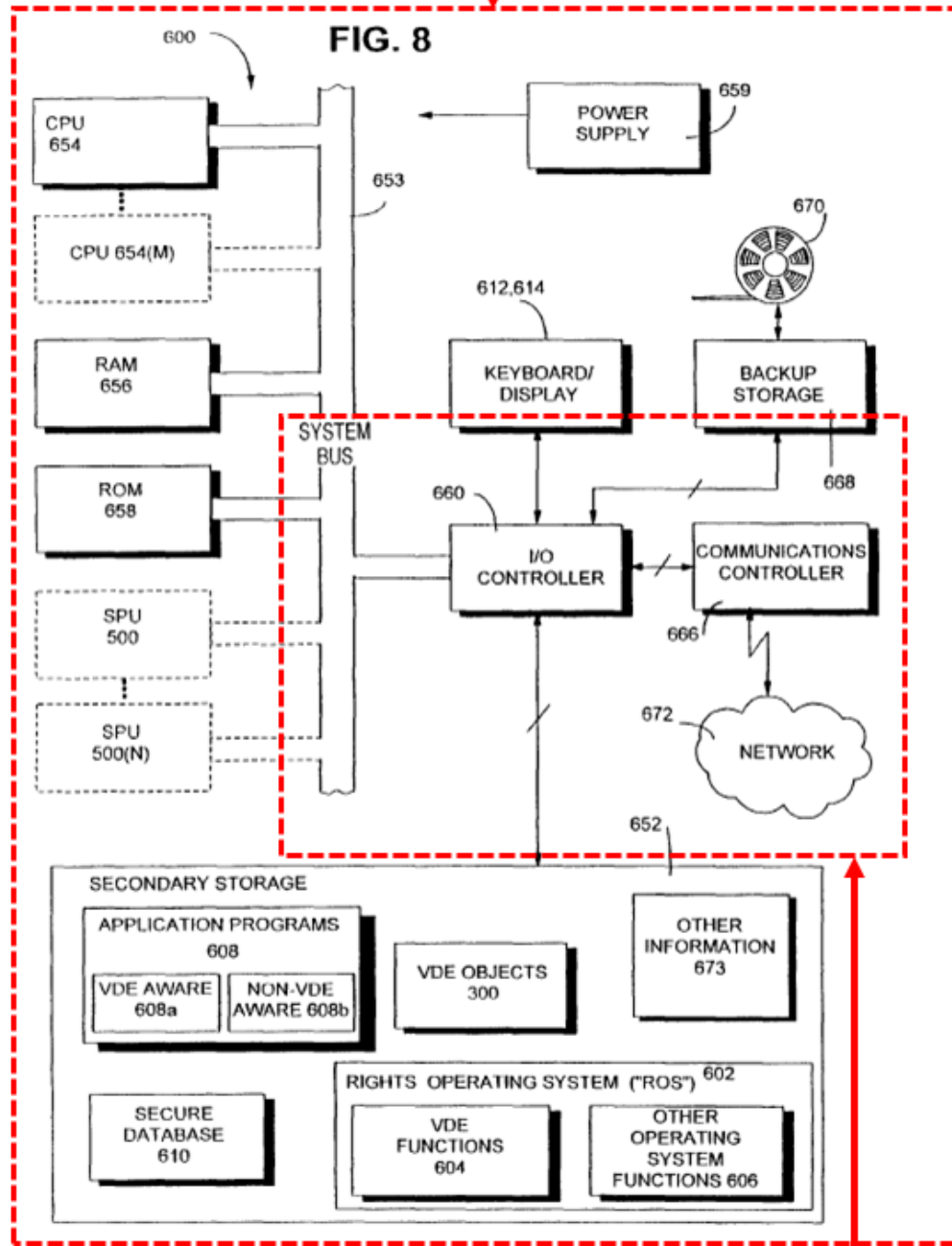
External bus interface 2606, e.g., is an interface for reading and writing data from and to PEA 2600. See Ginter at 228:39-50 (“Portable appliance 2600 may include a portable housing 2602 that may be about the size of a credit card in one example. Housing 2602 may connect to the outside world through, e.g., an electrical connector 2604 having one or more electrical contact pins (not shown). Connector



2604 may electrically connect an external bus interface 2606 internal to housing 2602 to a mating connector 2604a of a host system 2608. External bus interface 2606 may, e.g., comprise a PCMCIA (or other standard) bus interface to allow portable appliance 2600 to interface with and communicate over a bus 2607 of host system 2608”), 41:13-16 (“A docking station, such as a PCMCIA connector on an electronic appliance, such as a personal computer, can receive a consumer's VDE card at home”), 230:20-42, FIGS. 8 and 71; Bloom at, e.g., ¶¶ 44, 45; see also Ginter at 62:30-33, 224:61-225:6, 282:64-283:2.

In more detail, PEA 2600's external bus interface 2606 may interface with a host system, such as electronic appliance 600, that includes a data carrier interface (e.g., a mating connector, electronic connector bus interface, and/or system bus). See Ginter at 41:13-16 (“A docking station, such as a PCMCIA connector on an electronic appliance, such as a personal computer, can receive a consumer's VDE card at home”), 230:20-42 (“portable appliance 2600 may have the form factor of a ‘smart card’ [and] may be insertable into and removable from a port, slot or other receptacle provided by host 2608 so as to be physically (or otherwise operatively) connected to a computer or other electronic appliance”), 228:39-50 (“Connector 2604 may electrically connect an external bus interface 2606 internal to housing 2602 to a mating connector 2604a of a host system 2608”), FIGS. 8 and 71; Bloom at, e.g., ¶¶ 44, 45.

1(a): Electronic appliance 600 may be implemented as a host system that, when connected to PEA 2600's external bus 2606, can read and write data to and from PEA 2600. See, e.g., Ginter at 41:13-16, 230:20-42



1(a): Electronic appliance 600 may interface with data carriers (e.g., with PEA 2600) through components that may include I/O controller 660 and communications controller 666. See, e.g., Ginter at 41:13-16, 62:25-40, 230:20-42.

When electronic appliance 600 and PEA 2600 are electronically coupled through the data carrier interface of electronic appliance 600 and the external bus interface 2606 of PEA 2600, electronic appliance 600 may read data (e.g., use rules) from PEA 2600's use rule memory (e.g., secure database portion 610 of the memory of the SPU 500 of the PEA 2600), and write data (e.g., content objects) to PEA 2600's content data memory (e.g., removable/replaceable memory 2622). See Ginter at 41:7-16 (“[an electronic appliance 600 and connected PEA] can securely exchange information related to a transaction, with credit and/or electronic currency being transferred to a merchant and/or clearinghouse and transaction information flowing back to the card”), 48:65-49:14 (“SPUs provide a trusted environment for . . . securely accumulating and managing audit trail, reporting, and budget information in secure and/or non-secure non-volatile 10 memory, [and] maintaining a secure database of control information management instructions”), 65:61-67 (“Stored in each electronic appliance secondary memory 652 may be, e.g. . . . objects 300 containing VDE controlled property content and related information”); Bloom at, e.g., ¶¶ 49, 65, 68.

*1 (b): content data memory, coupled to the interface, for storing one or more content data items on the carrier;*

Removable/replaceable memory 2622, e.g., is a content data memory that is coupled to the interface (e.g., external bus interface 2606) by bus 2610, and that

stores content data items (content objects) on the portable data carrier (PEA 2600).  
See Ginter at 230:15-19 (“Removable/replaceable memory 2622 may comprise a memory cartridge or memory medium such as a bulk storage device, for providing additional long-term or short-term storage”), 229:18-34 (“Portable appliance 2600 may, in one embodiment, comprise means to perform substantially all of the functions of a VDE electronic appliance 600. Thus, e.g., portable 20 appliance 2600 may include the means for storing . . . information, and can be capable of operating as a ‘stand alone’ VDE node”), 65:61-67 (“Stored in each electronic appliance secondary memory 652 may be, e.g. . . . objects 300 containing VDE controlled property content and related information”); Bloom at, e.g., ¶ 46.

*1 (c): use rule memory to store one or more use rules for said one or more content data items;*

The secure database portion 610 of the memory of the SPU 500 of the PEA 2600, e.g., is a memory that is coupled to the interface (e.g., external bus interface 2606) by bus 2610, and that stores use rules (e.g., billing method MDE and/or budget method UDE) for one or more content data items (content objects). See FIG. 71, 169:4-6 (“In one alternate embodiment, SPU 500 may have sufficient internal, non-volatile memory to allow it to store some or all of secure database 610”), 48:65-49:14 (“SPUs provide a trusted environment for . . . securely accumulating and managing audit trail, reporting, and budget information in secure and/or

non-secure non-volatile 10 memory, [and] maintaining a secure database of control information management instructions”), 63:34-41 (“SPU 500 may also perform secure data management processes including governing usage of, auditing of, and where appropriate, payment for VDE objects”), Bloom at, e.g., ¶ 48.

*1 (d): a program store storing code implementable by a processor; and*

The PEA 2600 includes a program store (e.g., ROM 2617) storing code (e.g., software instructions) implementable by a processor (e.g., SPU 500 and/or 2616). See Ginter at 229:34-41 (“appliance 2600 . . . includes a tamper-resistant package (housing 2602) containing one or more processors (500, 2616) and/or other computing devices and/or other control logic, along with random-access-memory 2614. Processors 500, 2616 may execute permissions and methods wholly (or at least in part) within the portable appliance 2600”), 229:61-67 (“any or all of the following optional components may also be included within housing 2602: one or more CPUs 2616 (with associated support components such as RAM-ROM 2617, I/O controllers (not shown), etc.”), 79:60-67 (“HPE 655 is a secure processing environment supported by a processor other than an SPU, such as e.g. an electronic appliance CPU 654 general-purpose microprocessor . . . HPE 655 may be considered to “emulate” an SPU 500 in the sense that it may use software to provide some or all of the processing resources provided in hardware and/or firm-

ware by an SPU”), FIG. 71; Bloom at, e.g., ¶ 50; see also Ginter at 60:49-62; 63:8-25; 65:42-66:2, FIGS. 8, 9.

*1(e): a processor coupled to the content data memory, the use rule memory, the interface and to the program store for implementing code in the program store,*

The PEA 2600 includes a processor (e.g., SPU 500 and/or CPU 2616) coupled to the content data memory (e.g., removable/replaceable memory 2622), the use rule memory (e.g., secure database portion 610 of the memory of the SPU 500), the interface (e.g., external bus interface 2606), and the program store (e.g., ROM 2617), for implementing code in the program store. See FIG. 71; Bloom at, e.g., ¶ 51. The processor (e.g., SPU 500 and/or CPU 2616) executes code (e.g., software instructions) stored in the program store (e.g., ROM 2617). See Ginter at 65:42-51 (“Microprocessor 520 is the ‘brain’ of SP 500. In this example, it executes a sequence of steps specified by code stored (at least temporarily) within ROM 532 and/or RAM 534”), 229:34-41 (“Processors 500, 2616 may execute permissions and methods wholly (or at least in part) within the portable appliance 2600”), FIGS. 9 and 71; Bloom at, e.g., ¶ 51; see also Ginter at 62:13-17, 62:25-28, 62:56-58, 63:8-15, 65:51-66:2, 75:35-37, 79:60-67, FIG. 8.

*1(f): wherein the code comprises code for storing at least one content data item in the content data memory and at least one use rule in the use rule memory.*

The processor (e.g., SPU 500 and/or CPU 2616) executes code (e.g.,

software instructions stored in ROM 2617) to perform functions including storing at least one content data item (e.g., content object) in the content data memory (e.g., removable/replaceable memory 2622). See Ginter at 62:64-65 (“Secondary storage 652 may also store one or more VDE objects 300”), 229:18-20 (“Portable appliance 2600 may, in one embodiment, comprise means to perform substantially all of the functions of a VDE electronic appliance 600”), 230:7-19 (“In other, enhanced examples of portable appliance 2600, any or all of the following optional components may also be included within housing 2602: . . . one or more removable/replaceable memory device(s) 2622; and one or more printing device(s) 2624. . . . Removable/replaceable memory 2622 may comprise a memory cartridge or memory medium such as a bulk storage device, for providing additional long-term or short-term storage. Memory 2622 may be easily removable from housing 2602 if desired”), FIG. 71; Bloom at, e.g., ¶¶ 46, 60.

The processor (e.g., SPU 500 and/or CPU 2616) also executes code (e.g., software instructions stored in ROM 2617) to perform functions including storing at least one use rule (e.g., billing method MDE and/or budget method UDE) in the use rule memory (e.g., secure database portion 610 of the memory of the SPU 500). See Ginter at 169:4-6 (“SPU 500 may have sufficient internal, non-volatile memory to allow it to store some or all of secure database 610”), 48:65-

49:14 (“SPUs provide a trusted environment for . . . securely accumulating and managing audit trail, reporting, and budget information in secure and/or non-secure non-volatile 10 memory, [and] maintaining a secure database of control information management instructions”), 63:34-41 (“SPU 500 may also perform secure data management processes including governing usage of, auditing of, and where appropriate, payment for VDE objects”), 186:56-62 (“BUDGET method 1510 may . . . perform a billing operation . . . by reading a BUDGET method UDE from the secure database, modifying it, and writing it back to the secure database (block 1604)”), 187:52-57 (“METER method 1506 may then read a METER method UDE from the secure database (block 1562), modify the meter UDE by adding an appropriate event count to the meter value contained in the meter UDE (block 1564), and then writing the modified meter UDE back to the secure database (block 1562)”), 190:45-57 (“BILLING method 1980 may then obtain and load a BILLING method map DTD from the secure database (blocks 1985, 1986), which describes the BILLING method map MDE (e.g., a price list, table, or parameters to the billing amount calculation algorithm) that should be used by this BILLING method”); Bloom at, e.g., ¶¶ 48, 61, 62; see also Ginter at 62:64-67, 126:36-44, 181:7-12, 229:18-20, 230:7-19.

*7: A portable data carrier as claimed in claim 1, further comprising payment data memory to store payment data and code to provide the payment data to a*



*payment validation system.*

The secure database portion 610 of the memory of the SPU 500 of the PEA 2600, e.g., is a payment data memory that stores payment data (e.g., audit information). See Ginter at 169:4-6 (“In one alternate embodiment, SPU 500 may have sufficient internal, non-volatile memory to allow it to store some or all of secure database 610”), 184:65-185:2 (“control method 1502 may prime an audit process (block 1533) and write audit information into an audit UDE (block 1534) so a record of the transaction exists even if the transaction fails or is interfered with”), FIG. 71; Bloom at, e.g., ¶ 48; see also Ginter at 62:64-67, 63:34-41, 126:36-44, 161:42-161:6, 163:38-61, 175:3-22, 175:47-176:1, 229:18-20, 230:7-19, 184:65-185:2, FIG. 8.

PEA 2600’s processor (e.g., SPU 500 and/or CPU 2616) executes code (e.g., software instructions stored in ROM 2617) to perform functions including providing payment data (e.g., audit information) to a payment validation system (e.g., clearinghouse and/or external object repository). See Ginter at, 231:64-232:1 (“When a portable appliance 2600 is ‘docked’ to a host 2608 such as a personal computer or other electronic appliance (such as an electronic organizer), the portable appliance 2600 could communicate interim audit information to the host”), 161:42-161:6 (“Once a secure connection is established, the end user’s electronic appliance may determine (e.g., based on Shipping Table 444)

whether it has any administrative object(s) containing audit information that it is supposed to send to the clearinghouse (decision Block 1156). Audit information pertaining to several VDE objects 300 may be placed within the same administrative object for transmission, or different administrative objects may contain audit information about different objects. Assuming the end user's electronic appliance has at least one such administrative object to send to this particular clearinghouse ('yes' exit to decision Block 1156), the electronic appliance sends that administrative object to the clearinghouse via the now-established secure real-time communications (Block 1158). . . . The clearinghouse may receive the administrative object and process its contents to determine whether the contents are 'valid' and 'legitimate.'”), 232:19-24 (“During such a secure two-way communication between, e.g., each participant's secure VDE subsystem, portable appliance 2600 VDE secure subsystem may provide authentication and appropriate credit or debit card information to the retail terminal VDE secure subsystem”), FIG. 71; Bloom at, e.g., ¶ 48; see also Ginter at 9:24-32, 126:36-52, 163:38-61, 169:4-6; 63:34-41, 175:3-22, 175:47-176:1, 184:65-185:2, FIG. 8.

## **VI. CONCLUSION**

The cited prior art reference(s) identified in this Petition contain pertinent technological teachings (both cited and uncited), either explicitly or inherently disclosed, which were not previously considered in the manner presented herein, or

relied upon on the record during original examination of the '598 Patent. In sum, these references provide new, non-cumulative technological teachings which indicate a reasonable likelihood of success as to Petitioner's assertion that the Challenged Claim of the '598 Patent are not patentable pursuant to the grounds presented in this Petition. Accordingly, Petitioner respectfully requests institution of a CBM for those claims of the '598 Patent for each of the grounds presented herein.

Respectfully submitted,

Dated: September 26, 2014

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## **CERTIFICATE OF SERVICE**

Pursuant to 37 CFR §§ 42.6(e)(4)(i) *et seq.* and 42.105(b), the undersigned certifies that on September 26, 2014, a complete and entire copy of this Petition for Covered Business Method Patent Review and all supporting exhibits were provided by Federal Express, cost prepaid, to the Patent Owner by serving the correspondence address of record as follows:

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