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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	SCIH 1 US
First Inventor	VALJAKKA, Lauri
Title	A method of and system for providing access to access restricted content to a user
Express Mail Label No.	

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☑ **Fee Transmittal Form.** (PTO/SB/17 or equivalent)
2. ☑ **Applicant claims small entity status.** See 37 CFR 1.27.
3. ☑ **Specification.** [*Total Pages* 23] Both the claims and abstract must start on a new page *(For information on the preferred arrangement, see MPEP § 608.01(a))*
4. ☑ **Drawing(s).** *(35 U.S.C. 113)* [*Total Sheets* 8]
5. **Inventor's Oath or Declaration.** [*Total Sheets* ____] *(including substitute statements under 37 CFR 1.64 and assignments serving as an oath or declaration under 37 CFR 1.63(e))*
   a. ☐ Newly executed (original or copy)
   b. ☐ A copy from a prior application (37 CFR 1.63(d))
6. ☑ **Application Data Sheet.** **See Note below.* See 37 CFR 1.76 (PTO/AIA/14 or equivalent)
7. ☐ **CD-ROM or CD-R.** in duplicate, large table or Computer Program *(Appendix)*
   ☐ Landscape Table on CD
8. **Nucleotide and/or Amino Acid Sequence Submission.** *(if applicable, items a. – c. are required)*
   a. ☐ Computer Readable Form (CRF)
   b. ☐ Specification Sequence Listing on:
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ACCOMPANYING APPLICATION PARTS

9. ☐ **Assignment Papers.** (cover sheet & document(s))
   Name of Assignee_____
10. ☐ **37 CFR 3.73(c) Statement.** ☐ **Power of Attorney.** *(when there is an assignee)*
11. ☐ **English Translation Document.** *(if applicable)*
12. ☐ **Information Disclosure Statement.** (PTO/SB/08 or PTO-1449)
    ☐ Copies of citations attached
13. ☐ **Preliminary Amendment.**
14. ☐ **Return Receipt Postcard.** *(MPEP § 503) (Should be specifically itemized)*
15. ☐ **Certified Copy of Priority Document(s).** *(if foreign priority is claimed)*
16. ☐ **Nonpublication Request.** Under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or equivalent.
17. ☐ **Other:**_____

***Note:** (1) Benefit claims under 37 CFR 1.78 and foreign priority claims under 1.55 **must** be included in an Application Data Sheet (ADS).
(2) For applications filed under 35 U.S.C. 111, the application must contain an ADS specifying the applicant if the applicant is an assignee, person to whom the inventor is under an obligation to assign, or person who otherwise shows sufficient proprietary interest in the matter. See 37 CFR 1.46(b).

18. CORRESPONDENCE ADDRESS

☑ The address associated with Customer Number: 95002 ***OR*** ☐ Correspondence address below

Name					
Address					
City		State		Zip Code	
Country		Telephone		Email	

Signature	/Joshua P. Wert Reg. No. 65880/	Date	2015-01-08
Name (Print/Type)	Joshua P. Wert	Registration No. (Attorney/Agent)	65880

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SCIH 2 US
	Application Number	
Title of Invention	A method of and system for providing access to access restricted content to a user	

The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.
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☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

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Inventor 1 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
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Residence Information (Select One) ○ US Residency ◉ Non US Residency ○ Active US Military Service

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Postal Code	53100	**Country**	FI

Inventor 2 Remove

Legal Name

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	Jukka-Pekka		Jussila	

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Postal Code	53100	**Country**	FI

Inventor 3 Remove

Legal Name

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SCIH 2 US
	Application Number	
Title of Invention	A method of and system for providing access to access restricted content to a user	

Prefix	Given Name	Middle Name	Family Name	Suffix
	Jari		Tapio	

Residence Information (Select One) ○ US Residency ◉ Non US Residency ○ Active US Military Service

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Customer Number	95002		
Email Address	posti@seppolaine.fi	Add Email	Remove Email

Application Information:

Title of the Invention	A method of and system for providing access to access restricted content to a user		
Attorney Docket Number	SCIH 2 US	**Small Entity Status Claimed** ☒	
Application Type	Nonprovisional		
Subject Matter	Utility		
Suggested Class (if any)		**Sub Class (if any)**	
Suggested Technology Center (if any)			
Total Number of Drawing Sheets (if any)	8	**Suggested Figure for Publication (if any)**	1

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SCIH 2 US
	Application Number	
Title of Invention	A method of and system for providing access to access restricted content to a user	

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Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
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Application Number	Country[i]	Filing Date (YYYY-MM-DD)	Priority Claimed
20145013	FI	2014-01-08	◉ Yes ○ No

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	Application Number	
Title of Invention	A method of and system for providing access to access restricted content to a user	

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Applicant 1

If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.

◉ Assignee	○ Legal Representative under 35 U.S.C. 117
○ Person to whom the inventor is obligated to assign.	○ Person who shows sufficient proprietary interest

If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:

Name of the Deceased or Legally Incapacitated Inventor :	
If the Assignee is an Organization check here. ☒	
Organization Name	SC Intelligent Holding Ltd.

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SCIH 2 US
	Application Number	
Title of Invention	A method of and system for providing access to access restricted content to a user	

Email Address	

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Signature	/Joshua P. Wert Reg. No 65880/			Date (YYYY-MM-DD)	2015-01-08
First Name	Joshua	Last Name	Wert	Registration Number	65880

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A METHOD OF AND SYSTEM FOR PROVIDING ACCESS TO ACCESS RESTRICTED CONTENT TO A USER

FIELD OF THE INVENTION

This invention relates generally to a method of using digital rights management keys to provide access to access restricted content. In particular, this invention relates to an apparatus, method and/or system for providing access to access restricted content to a user and a method thereof.

BACKGROUND TO THE INVENTION

Many publishers, copyright holders, and individuals wish to control the use of digital content and devices after sale. There are numerous ways of controlling and protecting such digital content, for example, using digital rights management methods. However, such digital rights management methods are in general not effective.

The aim of the present invention is thus to provide an alternative method of and a system for providing access to access restricted content to a user.

SUMMARY OF THE INVENTION

According to a first aspect of the invention, there is provided a system for providing access to access restricted content to a user, the system including a communication arrangement operable to receive a content request message, the content request message including a content identifier, a processor configured to cause a first determination to be performed to yield a positive or a negative result, a validation module configured to, in response to the first determination yielding a positive result, obtain a first digital rights management key, the processor being further configured to cause a second determination to be performed to yield a

positive or a negative result, and responsive to the first and second determinations yielding a positive result, the validation module is configured to cause access to the access restricted content to be provided to the user.

According to a second aspect of the present invention, there is provided a method, comprising receiving a content request message, the content request message including a content identifier of an access restricted content, causing a first determination to be performed to yield a positive or a negative result, obtaining, in response to the first determination yielding a positive result, a first digital rights management key, causing a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, causing access to the access restricted content to be provided to the user.

In a first set of embodiments of the invention in accordance with the second aspect, the method comprises causing transmission of the access restricted content to the user, wherein the access restricted content comprises in encrypted form at least one of a second and a third digital rights management key, wherein the at least one of the second and a third digital rights management key is obtainable from the access restricted content by using the first digital rights management key.

In a second set of embodiments of the invention in accordance with the second aspect, the second determination is based at least in part on a fingerprint of the access restricted content.

According to a first set of variants of the second set of embodiments in accordance with the second aspect, the method comprises performing the second determination by comparing a first fingerprint received in the apparatus from the user to a second fingerprint received in the apparatus from a content database.

According to a third aspect of the present invention, there is provided an apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to obtain an access restricted content from at least one of a content database and a content providing server, obtain a first digital rights management key, derive, using the first digital

rights management key, from the access restricted content information describing encryption properties of the access restricted content, and to derive, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key.

According to a fourth aspect of the present invention, there is provided a method, comprising obtaining an access restricted content from at least one of a content database and a content providing server, obtaining a first digital rights management key, deriving, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content, and deriving, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key.

According to a fifth aspect of the present invention, there is provided a non-transitory computer readable medium having stored thereon a set of computer readable instructions for a causing an apparatus to perform actions, the computer readable instructions comprising code for receiving a content request message, the content request message including a content identifier of an access restricted content, code for causing a first determination to be performed to yield a positive or a negative result, code for obtaining, in response to the first determination yielding a positive result, a first digital rights management key, code for causing a second determination to be performed to yield a positive or a negative result, and code for causing, responsive to the first and second determinations yielding a positive result, access to the access restricted content to be provided to the user.

According to a sixth aspect of the present invention, there is provided an apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to receive a content request message, the content request message including a content identifier of an access restricted content, cause a first determination to be performed to yield a positive or a negative result, obtain, in response to the first determination yielding a positive result, a first digital rights management key, cause a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, to cause access to the access restricted content to be provided to the user.

In some embodiments of the invention in accordance with the first, second, third, fourth, fifth and/or sixth aspects the first digital rights management key is unique to a specific session.

In response to a determination that the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers, the validation module may generate a first digital rights management key and a header associated with the content identifier.

The communication arrangement may be operable to receive a content usage request message, the content usage request message including the user identifier, the first digital rights management key and the content identifier.

In an embodiment, the interrogation module may further be operable to interrogate the content database in order to determine whether or not the first digital rights management key and content identifier matches with any combination of first digital rights management key and the content identifier stored in the content database; and if the answer is affirmative, the validation module may provide content access to access restricted content to the user.

The header may be associated with the particular content and the first digital rights management key are used to obtain access to the access restricted content.

The validation module may further analyze the header associated with the first digital rights management key and may prepare a second digital rights management key.

The system may include a decryption module operable to use the first digital rights management key and second and third digital rights management keys in order to decode the content, thereby allowing the user use of content.

The validation module may further analyze the second digital rights management key in order to prepare a third digital rights management key.

In this embodiment, the interrogation module may be operable to determine whether or not the second digital rights management key is used to prepare the third digital rights management key; and if the answer is affirmative, the decryption module may use the first digital rights management key and the third digital rights management key to decode the content, thereby allowing the user use of content.

If the answer is negative, the decryption module may use the first digital rights management key, the second digital management key and the third digital rights management key to decode the content, thereby allowing the user use of content.

The content may be compressed. In some embodiments, the content is media content.

In this embodiment, the system may include an extraction module being operable to extract the compressed content, thereby allowing the user use of the content.

In addition, the system may include a calculation module being operable to calculate a time period indicative of time in which the user uses the content. The validation module may stop the use of the content by the user, in response to a determination that the calculated time period is equal to a pre-defined time period.

In an alternative embodiment, the system may include a content registration module being operable to register the status content usage against the user identifier and the content identifier on the content database. The status content usage may include the calculated time period associated with the user identifier and the content identifier.

In at least some embodiments, the user identifier is an identifier associated with a communication device of the user such as a MSISDN number of the communication device.

The invention further extends to a non-transitory computer readable medium having stored thereon a set of computer readable instructions for a causing a processor to provide access to access restricted content to a user comprising the computer implemented steps of;

receiving a content request message, the content request message including a unique identifier associated with the user and a content identifier;

interrogating a content database of content identifiers, digital management keys and user identifiers in order to determine whether or not the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers;

in response to a determination that there is a match, retrieving a first digital rights management key and a header associated with the user identifier;

interrogating the content database in order to determine whether or not the content identifier and the first digital rights management key matches with any combination of content identifier and first digital rights management key stored in the content database and associated with the user identifier; and

if the answer is affirmative, providing the content to the user.

In response to a determination that the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers, the computer readable instructions may include the computer implemented step of generating a first digital rights management key and a header associated with the content identifier.

The computer readable instructions may include the computer implemented steps of;

receiving a content access request message, the content access request message including the user identifier, the first digital rights management key and the content identifier;

interrogating the content database in order to determine whether or not the first digital rights management key and content identifier matches with any combination of first digital rights management key and the content identifier stored in the content database; and

if the answer is affirmative, the providing content access to access restricted content to the user.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be described, by way of example only, with reference to the accompanying drawings in which:

Figure 1 shows an example of network topology including a system for providing access to access restricted content to a user;

Figure 2 shows the system of Figure 1 in more detail;

Figure 3 shows a flowchart representing an example method of providing access to access restricted content to a user, according to another aspect of the present invention;

Figure 4 shows an example flow graph of a first method in accordance with at least some embodiments of the invention;

Figure 5 shows an example flow graph of a second method in accordance with at least some embodiments of the invention;

Figure 6 shows an example flow graph of a third method in accordance with at least some embodiments of the invention;

Figure 7 illustrates different DRM levels;

Figure 8 illustrates DRM key handling options;

Figure 9 illustrates DRM layers, and

Figure 10 illustrates an example DRM process sequence.

DETAILED DESCRIPTION

The following description of the invention is provided as an enabling teaching of the invention. Those skilled in the relevant art will recognize that many changes can be made to the embodiment described, while still attaining the beneficial results of the present invention. It will also be apparent that some of the desired benefits of the present invention can be attained by selecting some of the features of the present invention without utilizing other features. Accordingly, those skilled in the art will recognize that many modifications and adaptations to the present invention are possible and can even be desirable in certain circumstances, and are a part of the present invention. Thus, the following description is provided as illustrative of the principles of the present invention and not a limitation thereof.

In Figure 1 of the drawings, reference numeral 10 refers generally to an example of network topology including a system for providing access to access restricted content to a user. Referring also to Figure 2, an example system for providing access to access restricted content to a user is indicated by reference numeral 20.

The topology 10 includes a communication device 12 belonging to or used by a user (not shown) who intends to obtain access to access restricted content. It will be appreciated that the communication device 12 is may comprise a personal computer located at the premises of the user, a smart phone or a Personal Digital Assistant (PDA), for example. However, the communication device 12 can be a mobile telephone of the user or any other device with suitable communication capability. Communication device 12 may comprise any suitable device with communication capability, examples including tablet devices, set-top boxes, video game consoles etc.

In simple terms, the user (not shown) attempts to obtain access to access restricted content through the use of the user's communication device 12. The access restricted content may be stored in a database which is indicated as media storage device with reference numeral 14.

Prior to the user obtaining access to the access restricted content, the system 20 may be configured to ensure that the user or communication device 12 of the user has particular access, i.e., the communication device 12 is authorized to obtain access to such access restricted content.

The illustrated topology includes a content provider indicated as reference numeral 16. The content provider may be a publisher or a copyright holder, or any suitable person who owns rights to the content and wishes to restrict access to such content. In other cases, the content provider may be the copyright owner, while a content distributor can be another party which has been authorized to manage access to the content on behalf of the content provider 16. The restricted content is digital content in a form of digital media. The digital media can be of any suitable form, for example, text, audio, video, graphics, animations or images.

The system 20 (further described in Figure 2) is communicatively coupled to a communications network in the form of the Internet 18. Also communicatively coupled to the Internet is the communication device 12. The communication device 12 is thus connected to the system 18 via the Internet, for example. In use, the user may obtain access to the media content through Internet 18. The topology further illustrates a media storage device 14 which may form part of the system 20. Alternatively, the system 20 may be connected to the media storage device 14 via Internet 18 (as shown in Figure 1).

Referring now to Figure 2, the system 20, hereafter referred to as a content access authorization system 20, includes a content access authorization server 22 which, in turn, includes a processor 24 defining a plurality of modules 26, 28, 30 and 32 which correspond to functional tasks performed by the processor 24. The processor 204 includes an interrogation module 26, a validation module 28, a calculation module 30 and a decryption module 32. Modules 26, 28, 30 and 32 may be comprised of software modules configured to cause processor 24 to perform corresponding functions, or the modules may comprise hardware and software elements. For example, a decryption module may comprise decryption software and hardware features of processor 24 designed to facilitate decryption of data in processor 24.

Processor 24 may comprise an Intel Atom processor, for example. Server 22 may comprise memory, which is not illustrated, the memory being operable to store computer instructions processor 24 may execute to cause server 22 to perform various actions.

The content access authorization server 22 further includes a communication arrangement 34 operable to connect to the Internet 18. Communication arrangement 34 may comprise, for example, an Ethernet, fiber optic of wireless data interface. The authorization system 20 is operably connectable to a content database, that is, media storage device 14 for storing media content, content identifiers, digital management keys and/or user identifiers. The data storage device 14 can form part of the server 22 or be comprised as a standalone device external to server 22. In particular, there may be a plurality of media storage devices located within premises of various content providers and/or content distributors and communicatively coupled to the media storage device 14. The media storage device 14 stores therein a plurality of content identifiers and associated content, digital rights management keys and/or user identifiers. For example, each user may be able to have access to a particular content associated with a particular content identifier. Such user will be identified through the user identifier. In particular, the user identifier may comprise an identifier associated with the personal computer 12 of the user. In this case, the user may only be able to obtain access to the access restricted content, if the user attempts to access the access restricted content using the personal computer 12. In an embodiment where the communication device 12 is a mobile telephone, the identifier associated with the user may comprise an MSISDN number or session initiation protocol SIP identity associated with that particular mobile telephone.

Although described herein primarily with reference to an authorization server, communication device 12 may have similar structure, in particular communication device 12 may comprise a processor, memory and a communications arrangement which may each be similar to those described above.

Referring now also to Figure 3 which shows a high-level method for providing access to access restricted content to a user, in accordance with at least one embodiment of the invention. The example method 40 is not necessarily dependent on the system 20 and/or the network topology 10, and vice versa.

In the illustrated embodiment, the communication arrangement 34 receives (at block 44) a content request message from the personal computer 12 of the user. The content request message includes a unique identifier associated with the user and a content identifier. Therefore, the user can user a user interface, e.g., a keyboard and input, e.g., serial number of the personal computer 12 and a predefined number of the content to which user wishes to obtain access. The communication arrangement can include a receiver module (not shown) operable to receive the content request message.

The interrogation module 26 interrogates (at block 44) the media storage device 14 whether or not the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers. This is so as to check whether the user, for example, the communication device 12 of the user is registered to be able to have access to the media content. The media storage device 14 may have been populated during a period when the user pre-registered to have access to the access restricted content. For example, when the user purchased the media content, the user could have been requested to pre-register then. The pre-registration process can take any conventional format. For example, pre-registration may comprise that certain subscriber classes in a cellular network are granted access to certain classes of content, wherein granting access to a class of content comprises granting access to each content item comprised in the class of content.

The validation module 28 retrieves (at block 46) a first digital rights management key (Key #1) and a header associated with the user identifier in response to a determination that the received content identifier and user identifier matches with at least one combination of the stored user identifiers and content identifiers. Key #1 is retrieved from the media storage device 14, alternatively, Key #1 can be retrieved from a server which is located at the premises of the content distributor and/or content provider. In other embodiments, the Key #1 can be located at a server located at the user's premises. The interrogation module (at block 48) further interrogates the media storage device 14 in order to determine whether or not the content identifier and the Key #1 matches with any combination of content identifier and f Key #1 stored in the media storage device 14 and associated with the user identifier. If the

answer is affirmative, the validation module (at block 50) provides the access restricted media content to the user. Therefore, the Key #1 may be associated with the personal computer 12 of the user. In this instance, the Key #1 is used to provide the user access to access restricted media content. The Key #1 only provides access to the content i.e. the user is not able to use the content. Therefore, if the user attempts to obtain access to the access restricted content using a different personal computer, the user will not be able to obtain such access. This will prohibit users from providing the Key #1 to any other party in order for that party to access the access restricted content at another personal computer. The header is associated with the particular media content and the Key #1 and the header are used to obtain access to the access restricted content.

In an embodiment, in response to a determination that the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers, the validation module 28 may generate (not shown) a first digital rights management key and a header associated with the content identifier. The Key #1 can be generated from the environment and media content parameters. Generating a key from environment and media content parameters may comprise, for example, using parameters relating to communication device 12, a subscription of the user or aspects of the content in a key generation process. As a specific example, where communication device 12 comprises a cellular telephone, the key generation process may use as input information relating to a secret stored on a subscriber identity module, SIM, card. Therefore, each time when the user requires access to access restricted content, new Key #1 may be generated.

Once the user has access to the access restricted media content, the user may need to use the media content. In that instance, the communication arrangement 34 may receive (not shown) a content usage request message from the personal computer 12 of the user. In simple terms, the user uses the keyboard to indicate that he / she requires usage of the restricted media content. The content usage request message includes the user identifier, the Key #1 and the content identifier. Therefore, the user will use the generated / retrieved Key #1 in order to be allowed to use the restricted media content. The user may wish to use the restricted media content by, for example, copying the media content, listening to the media content or editing

(if allowed) the media content. The validation module 28 analyses the header associated with the Key #1 and prepares a second digital rights management key (Key #2). The preparation of the Key #2 may comprise, for example, performing a cryptographic operation on at least part of the access restricted content, wherein the cryptographic operation may employ Key #1. The cryptographic operation may comprise decrypting Key #2 by using Key #1. A decryption module (30) may be configured to use Key #1 and Key #2 to decode the media content, thereby allowing the user use of media content.

The validation module may further use Key #1 in order to prepare a third digital rights management key (Key #3). It will be appreciated that at least in some embodiments Key #2 and Key #3 cannot be prepared without Key #1. In these embodiments, the interrogation module 26 determines whether or not Key #1 is used to prepare the Key #2, and if the answer is affirmative, the decryption module 30 uses Key #1 and Key #2 to decode the media content, thereby allowing the user use of content. Alternatively, the decryption module may use Key #1, Key #2 and Key #3 to decode the media content, thereby allowing the user use of content. Key #3 may be obtained from the access restricted content using Key #1 in a similar was as described above in connection with obtaining Key #2.

In an example embodiment, the media content is compressed. In this embodiment, the system can include an extraction module (not shown). The extraction module is operable to extract the compressed media content, thereby allowing the user use of the content.

A calculation module 32 calculates (not shown) a time period indicative of time in which the user uses the content. The use of the media content may be available for a particular time period. For example, a user can be allowed to use the media for only one (1) hour. Therefore, the calculation module 32, as the user uses the media content, can calculate the user's usage period. When the calculated time period reaches a pre-defined usage time, e.g., one (1) hour, the validation module28 stops the use of the media content by the user.

In an alternative embodiment, the system 20 includes a content registration module (not shown). The content registration module registers the status content usage against the user identifier and the content identifier on the media storage device 14. The status content usage includes the calculated time period associated with the user identifier and the content

identifier. Therefore, it is possible to detect the rate of usage of the media content for each user, that is, the number of times the media content was accessed. The status content usage will also be able to provide an indication of the last time the media content was accessed by the user.

At least one of the first, second and third digital rights management keys may be, depending on the embodiment, arranged to be session-specific in the sense that it is generated dynamically for use in a single session. This is advantageous since if a session-specific key is compromised, it cannot be used to gain access to content in a subsequent session.

In general there is provided an apparatus, comprising at least one processor and a memory comprising program instructions. The apparatus may comprise a server, for example. The processor, memory and program instructions configured to cause the apparatus at to receive a content request message, the content request message including a content identifier of an access restricted content. The content request message may further comprise an identifier associated with the user. The apparatus may be caused to cause a first determination to be performed to yield a positive or a negative result and to obtain, in response to the first determination yielding a positive result, a first digital rights management key. The first determination may comprise a query, such as a query transmitted to a content database, the query comprising the content identifier and the identifier associated with the user. Alternatively to a query, the first determination may comprise a determination as to whether the access restricted content can be found in accordance with the content request.

The apparatus may be caused to cause a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, to cause access to the access restricted content to be provided to the user. The second determination may be based at least in part on a fingerprint of the access restricted content. The second determination may comprise a comparison between a first fingerprint received in the apparatus from the user to a second fingerprint received in the apparatus from a content database.

The second determination may comprise a check as to whether the user has rights to access the access restricted content.

In response to the first determination yielding a positive result, for example when a content database returns a positive result to a query, the apparatus is in at least some embodiments configured to obtain a header associated with the content identifier and wherein the header associated with the content identifier and the first digital rights management key are usable to at least in part obtain access to the access restricted content. The header may be obtained by the apparatus, for example, by receiving it from the content database.

In general there is provided a second apparatus comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to obtain an access restricted content from at least one of a content database and a content providing server. The second apparatus may be configured to obtain the access restricted content by receiving it over a cellular or Ethernet connection, for example. The second apparatus may be configured to store the access restricted content, at least in part, in a memory comprised in the second apparatus.

The second apparatus may be configured to obtain a first digital rights management key, to derive, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content and derive, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key. Where the second apparatus is caused to derive a second digital rights management key, it may be further configured to use the first and second digital rights management keys to obtain access to the content payload. The content payload may comprise, for example, a media file such as an audio or video recording.

Figure 4 shows an example flow graph of a first method in accordance with at least some embodiments of the invention. On the vertical axes are, from left or right, a content database, a content server, a client and content. The illustrates method begins in phase 410 and proceeds to phase 420, where the client performs a content location, for example by searching with at least one keyword. As a response, in phase 430 the client receives a content identifier. In phase 440, the client transmits a message to the content server, the message comprising the content identifier received in phase 440 and an identifier of the client. The message of phase

440 may comprise a content request message. Responsive to receiving the message of phase 440, the content server may transmit, in phase 450, a query to the content database, the query comprising the content identifier and client identifier.

Responsive to the query, the content database may reply, in phase 460, to the content server with a message comprising a validation result wherein the validation result may comprise a first DRM key. The content server determines whether the validation was successful in phase 470. In case the validation was unsuccessful, for example, where the client does not have access to the content, processing advances from phase 470 to phase 480 and ends. On the other hand where the validation was successful and the message of phase 460 comprises a first DRM key, processing advances from phase 470 to phase 490 where the content server transmits the first DRM key to the client.

Responsive to receipt of the first DRM key in phase 490, the client may access the content using at least in part the first DRM key. This is illustrated as phase 4100. The client may obtain, in phase 4120, a fingerprint of the content wherein the obtaining may be based at least in part on the first DRM key. In phase 4130, the client may transmit the fingerprint to the content server, optionally with the content identifier and in phase 4140, the content server may query the content database for the content fingerprint. The query may comprise the content identifier. In phase 4150, the content database may responsively provide the fingerprint to the content server. In phase 4160, the server may compare the fingerprints received in phases 4150 and 4130. In case of mismatch, the processing advances to phase 4170 and ends. In case the fingerprints match, processing advances to phase 4180 where the client is provided with a positive validation result.

Responsive to the positive validation result of phase 4180, the client in phase 4190 proceeds to access the content to retrieve a DRM header, and optionally also to apply the first DRM key to the header, responsive to which the client gains access, phase 4200, to an open DRM header of the content. Using the header the client may be enabled to prepare second and third DRM keys, and, optionally, to apply at least one of the second and third DRM keys to retrieve payload of the content. This retrieval is illustrated as phases 4210 and 4220.

After using the payload of the content, the client may inform the content server of this, phase 4230, and the server may inform the content database of this, in phase 4240. In phase 4250, the content database may inform the content server of a registration of the content, the message of phase 4250 optionally comprising a result code. The content server may notify the client of this, phase 4260 and the client may modify the content accordingly, phase 4270.

When the first method is used, at least one of the following may apply:

1) the client has an on-line connection with the server, and 2) the client has acquired the content before the validation starts.

Figure 5 shows an example flow graph of a second method in accordance with at least some embodiments of the invention. The vertical axes are identical to those in Figure 4. The process of Figure 5 begins in phase 510 and proceeds to phase 520, where the client requests content from the server. The message of phase 520 may comprise a content identifier and client identifier. The server may, phase 530, query the content database with the content identifier and client identifier. The content database replies in phase 540 whether the client should be granted access to the content.

In phase 550 the server determines whether the validation was successful, in other words whether the client is to be granted access to the content. In case no, processing advances to phase 560 and the process ends. In case the answer is yes, the server generates a DRM header, for example a dynamic DRM header, and a first DRM key. In phase 570 the server encrypts the content and streams it to the client, as well as calculates a content fingerprint.

In phase 580 the client saves the received content, optionally in a temporary location and in phase 590 the client obtains from the content a content fingerprint, which is sent along with the content identifier to the server in phase 5100.

In phase 5110 the server queries the content database for a content fingerprint of the content, the query comprising the content identifier and the client identifier. The server receives the fingerprint from the database in phase 5120. In phase 5130 the server determines whether the fingerprints received in phases 5120 and 5100 are the same. In case they are not, the server

informs the client of this in phase 5140, and responsively the client removes the content it stored in phase 580. In case the fingerprints match, phase 5150, the client is informed of this. In embodiments where the content was stored in a temporary location in phase 580, the client in phase 5160 moves the content to a final location. In embodiments where the content was stored in a non-temporary location in phase 580, the client may validate the content in phase 5160.

When the second method is used, at least one of the following may apply:

1) the client has an on-line connection to the server for receiving the streamed content, and 2) the client has been registered to the server before the streaming is started.

Figure 6 shows an example flow graph of a third method in accordance with at least some embodiments of the invention. On the vertical axes are illustrated, from left to right, a content accessor, who may be a client, a local provider and the content being accessed. The process begins in phase 610 and proceeds to phase 620, where the content accessor requests content from a local provider with a content identifier comprised in the request message. In phase 630, the local provider locates the content using the content identifier. In case the content is determined to not exist, processing advances to phase 640 and 650, where the local provider informs the accessor of this and the process ends. On the other hand if the content is determined to exist, processing advances to phase 660. The local provider generates a first DRM key and obtains a DRM header. The DRM is verified, and in case the verification fails processing advances to phase 670 where the content accessor is informed of this and processing ends. On the other hand if DRM verification succeeds, processing advances to phase 680 and the content accessor is granted access to the content, which may comprise, for example, an audio, video, or audiovisual presentation.

When the third method is used, at least one of the following may apply:

1) the content has been delivered to the content accessor from the server or from an external supplier. 2) the client is able to use the content without leaving it in an unprotected state. 3) the content is provided in a format that cannot be stored for later access, and 4) the content DRM is accessed only when the content needs to be shown or played.

Figure 7 illustrates different DRM levels. DRM levels may in this example be numbered from zero to five, with each level providing for different encryption and key management functionalities. Which level is used for a specific content item, may be determined from a DRM header of the content, for example. The keys described in the Figure may comprise DRM keys, for example.

Figure 8 illustrates DRM key handling options.

Figure 9 illustrates DRM layers in an example embodiment of the invention. The illustrated layers may be applied in sequence to the media layer, which may comprise a payload of the content item. To obtain access to the payload, a user may need to apply decryption operations in reverse order to the order in which encryption operations were performed. In different embodiments, at least one of the encryption layers illustrated in Figure 9 may be omitted.

Figure 10 illustrates an example DRM process sequence in an example embodiment of the invention. In the illustrated example, a set of DRM encryption layers such as the one illustrated in Figure 9 is opened in phases to ultimately allow access to the media, that is the content payload.

It should be noted that in the above, a "server" may take different forms depending on the embodiment. In particular, alternatively to a fixed computer residing in a network, in some embodiments a server may comprise a peer device to the client device, such as for example where the client device is a tablet or smartphone device, the server may also be a tablet or smartphone device.

CLAIMS

1. An apparatus, comprising:

means for receiving a content request message, the content request message including a content identifier of an access restricted content;

means for causing a first determination to be performed to yield a positive or a negative result;

means for obtaining, in response to the first determination yielding a positive result, a first digital rights management key;

means for causing a second determination to be performed to yield a positive or a negative result, and

means for causing, responsive to the first and second determinations yielding a positive result, access to the access restricted content to be provided to the user.

2. An apparatus as claimed in claim 1, wherein the first determination is based at least in part on a query, the query comprising the content identifier and an identifier associated with the user.

3. An apparatus according to claim 2, wherein the content request message further includes the identifier associated with the user.

4. An apparatus according to claim 3, wherein the apparatus is further configured to, in response to the first determination yielding a positive result, obtain a header associated with the content identifier and wherein the header associated with the content identifier and the first digital rights management key are usable to at least in part obtain access to the access restricted content.

5. A method, comprising:

receiving a content request message, the content request message including a content identifier of an access restricted content;

causing a first determination to be performed to yield a positive or a negative result;

obtaining, in response to the first determination yielding a positive result, a first digital rights management key;

causing a second determination to be performed to yield a positive or a negative result, and

responsive to the first and second determinations yielding a positive result, causing access to the access restricted content to be provided to the user.

6. An apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to:

obtain an access restricted content from at least one of a content database and a content providing server;

obtain a first digital rights management key;

derive, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content, and

derive, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key.

7. An apparatus according to claim 6, wherein the second digital rights management key is at least in part operable to obtain the content payload from the access restricted content.

8. An apparatus according to claim 6, wherein the apparatus is caused to obtain the first digital rights management key either by receiving it from a server or by generating it at least in part from at least one of environmental parameters and parameters of the access restricted content.

9. A method, comprising:

obtaining an access restricted content from at least one of a content database and a content providing server;

obtaining a first digital rights management key;

deriving, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content, and

deriving, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key.

ABSTRACT

According to an example embodiment of the invention, there is provided a system for providing access to access restricted content to a user, the system including a communication arrangement operable to receive a content request message, the content request message including a content identifier, a processor configured to cause a first determination to be performed to yield a positive or a negative result, a validation module configured to, in response to the first determination yielding a positive result, obtain a first digital rights management key, the processor being further configured to cause a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, the validation module is configured to cause access to the access restricted content to be provided to the user.

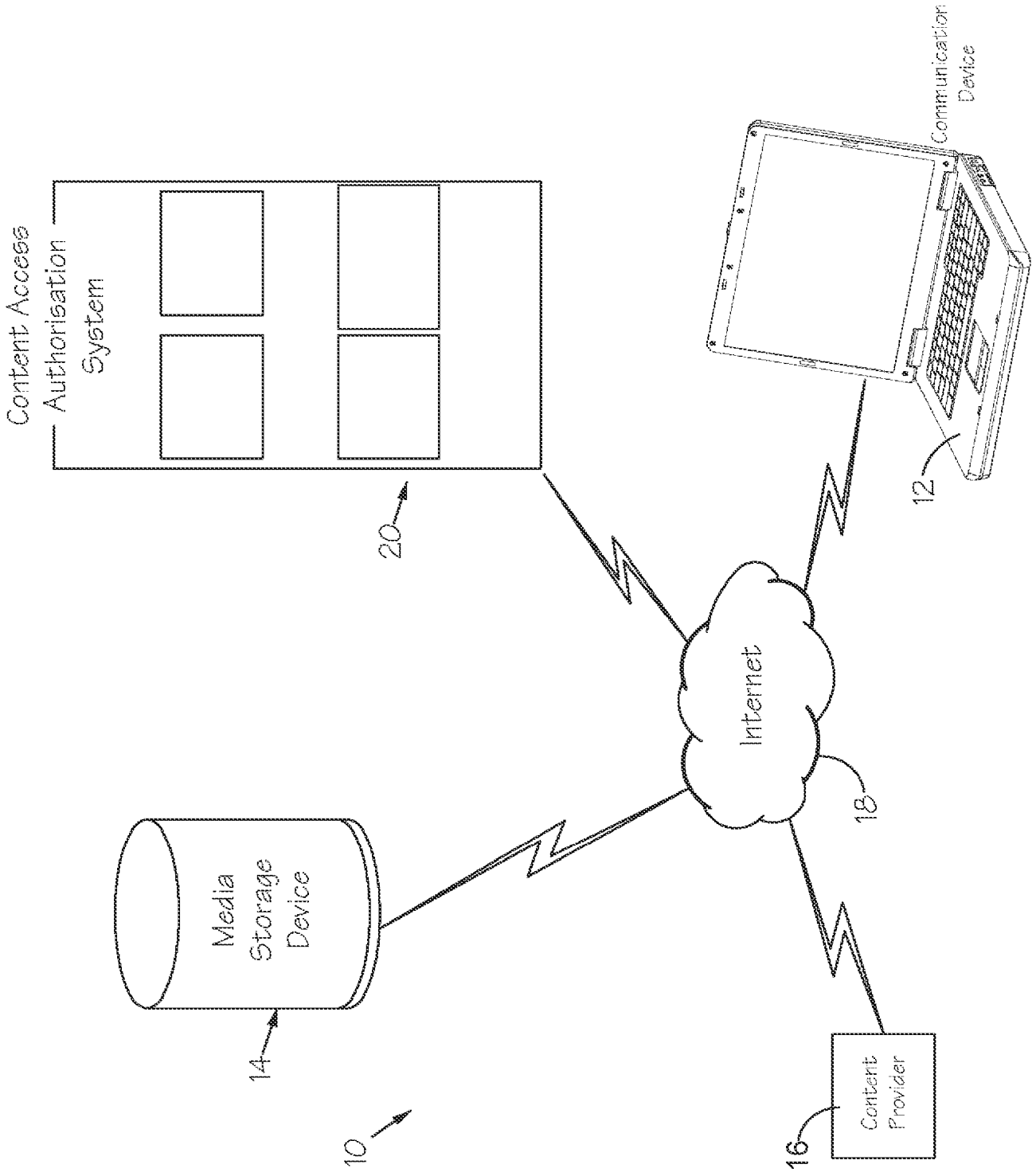

Content Access Authorisation System
20
Communication Device
12
Internet
18
Media Storage Device
14
Content Provider
16
10

FIG 1

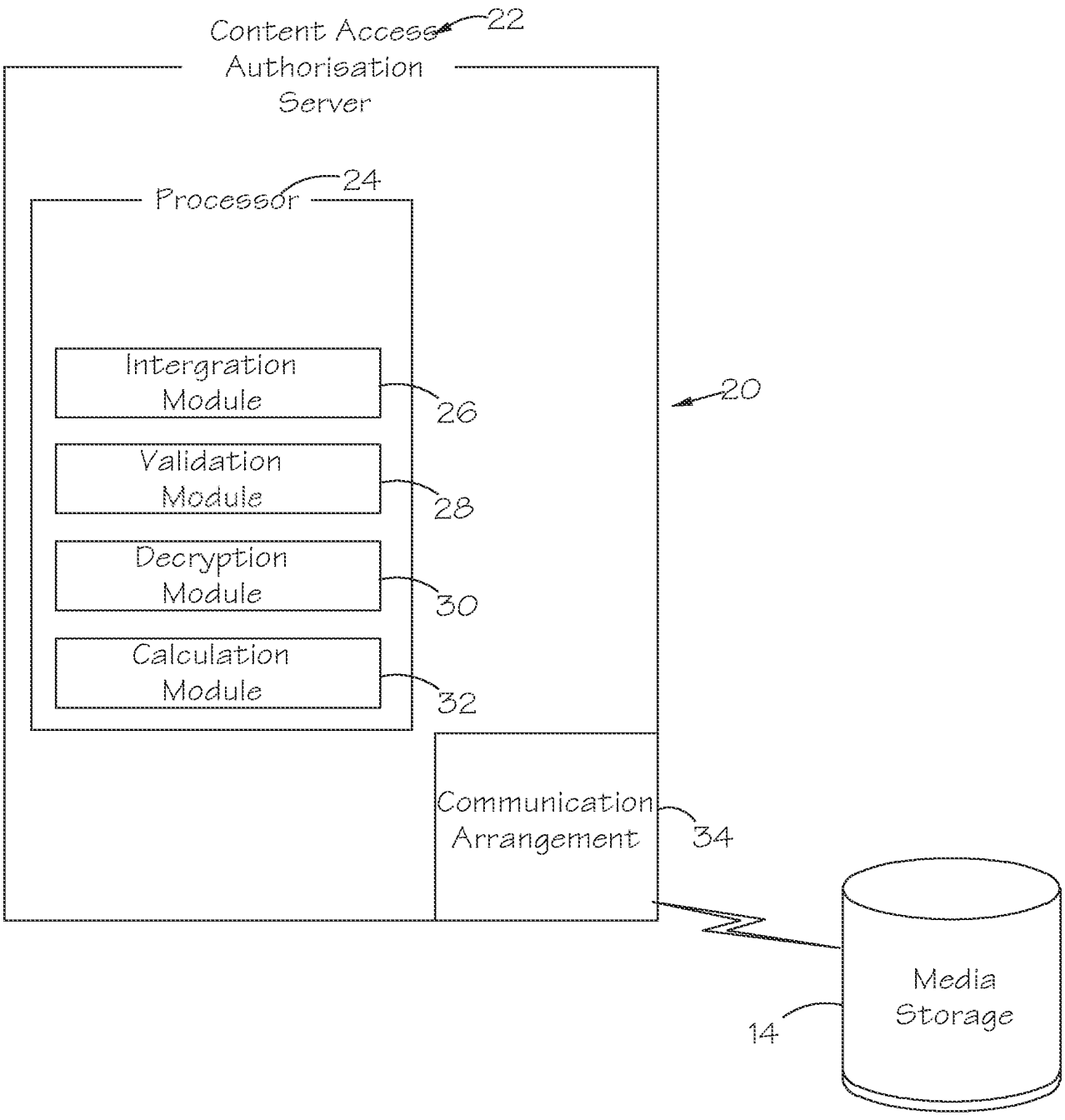

Content Access Authorisation Server
22
Processor
24
Intergration Module
26
Validation Module
28
Decryption Module
30
Calculation Module
32
20
Communication Arrangement
34
Media Storage
14

FIG 2

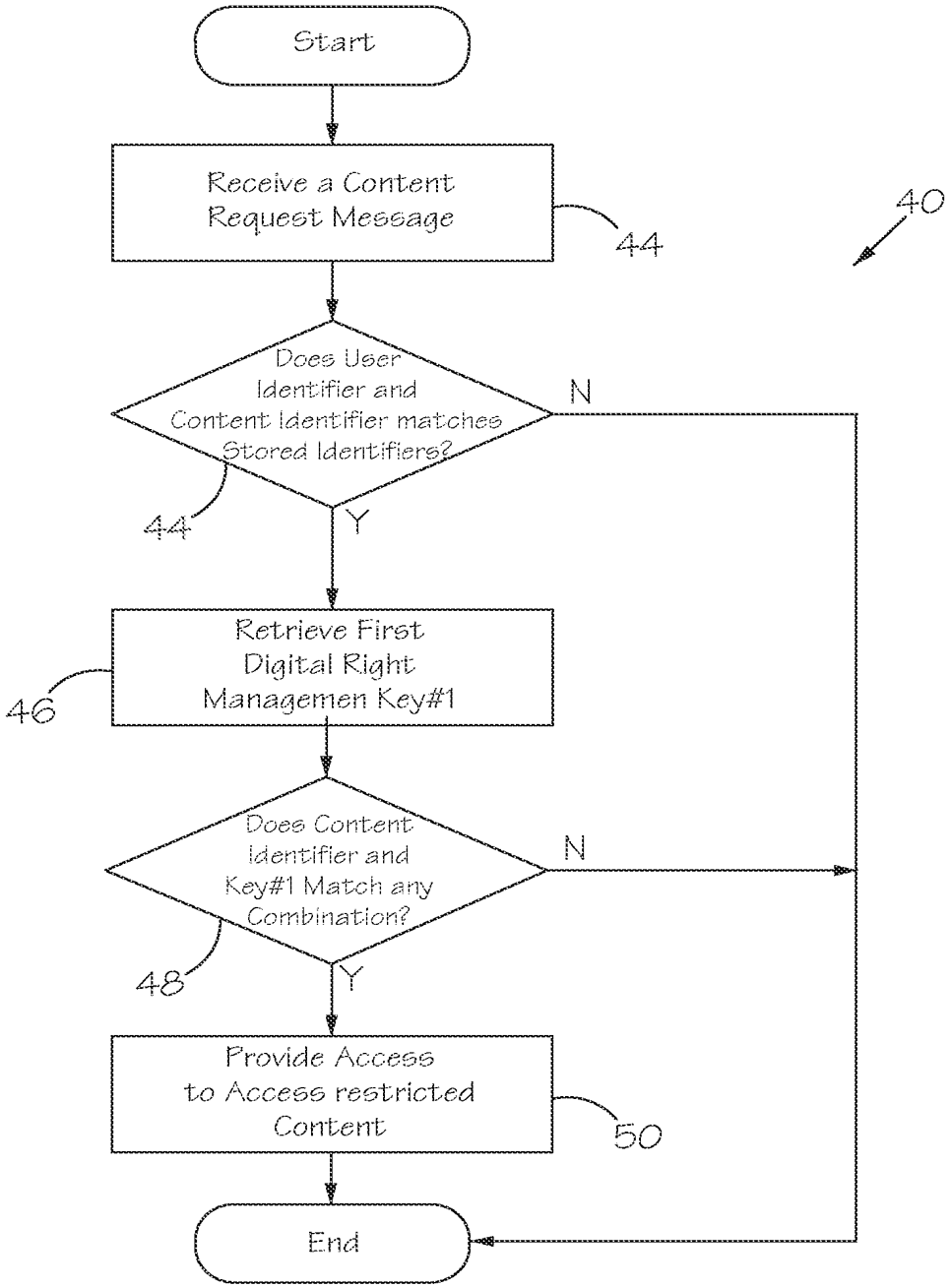

Start
Receive a Content Request Message
44
40
Does User Identifier and Content Identifier matches Stored Identifiers?
N
44
Y
Retrieve First Digital Right Managemen Key#1
46
Does Content Identifier and Key#1 Match any Combination?
N
48
Y
Provide Access to Access restricted Content
50
End

FIG 3

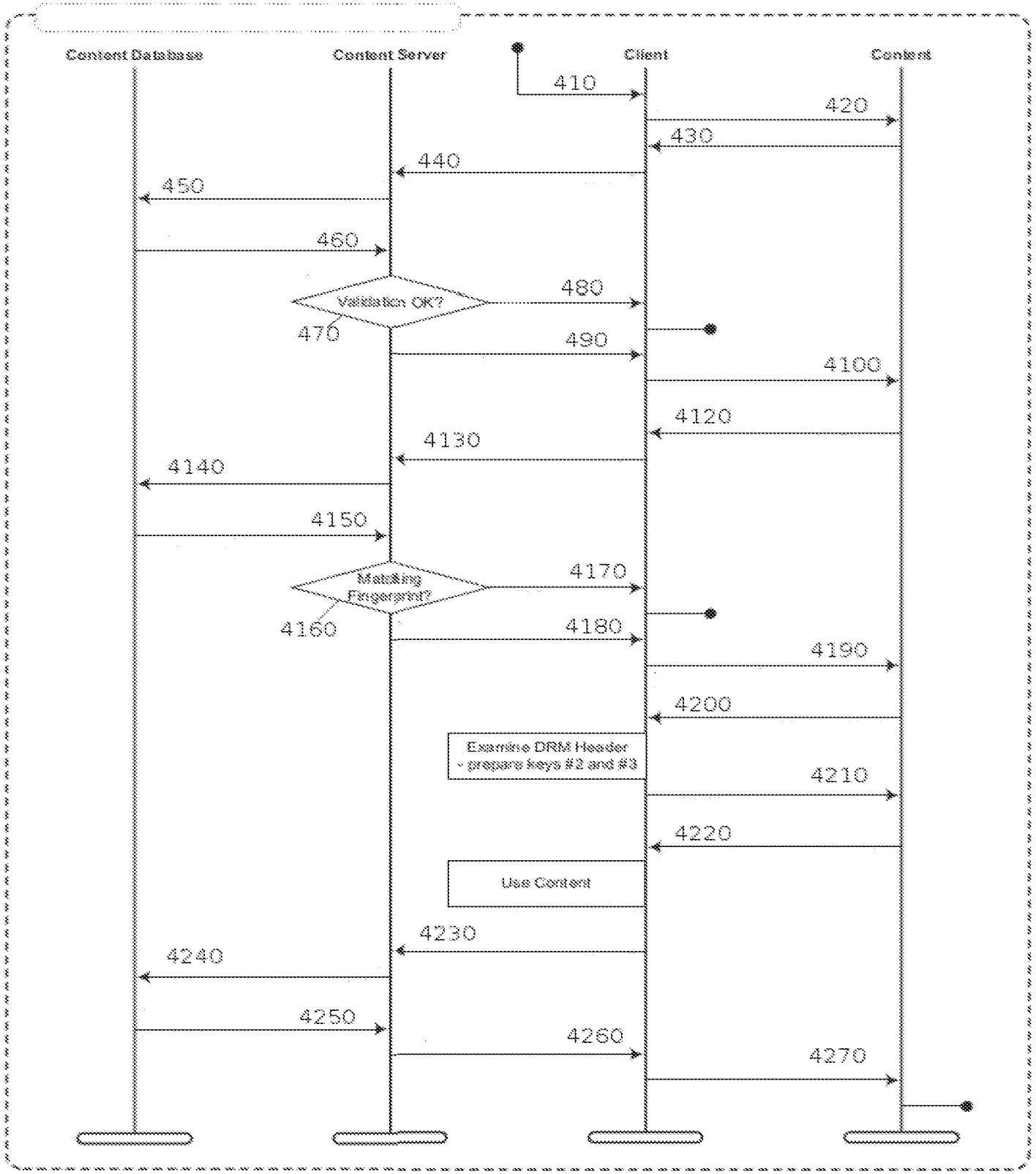

Content Database
Content Server
Client
Content
410
420
430
440
450
460
Validation OK?
470
480
490
4100
4120
4130
4140
4150
Matching Fingerprint?
4160
4170
4180
4190
4200
Examine DRM Header - prepare keys #2 and #3
4210
4220
Use Content
4230
4240
4250
4260
4270

FIGURE 4

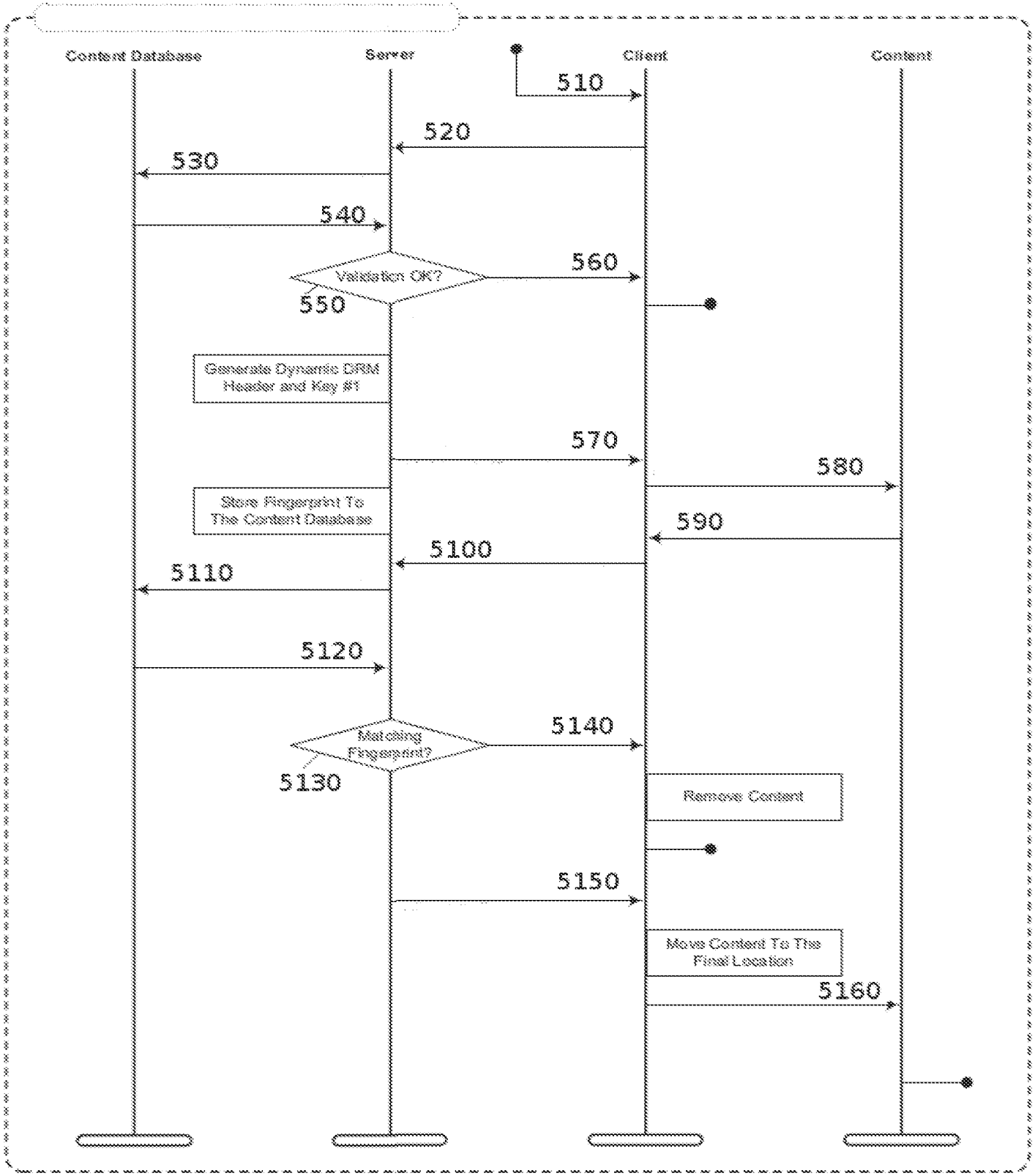

Content Database
Server
Client
Content
510
520
530
540
Validation OK?
560
550
Generate Dynamic DRM Header and Key #1
570
580
Store Fingerprint To The Content Database
590
5100
5110
5120
Matching Fingerprint?
5140
5130
Remove Content
5150
Move Content To The Final Location
5160

FIGURE 5

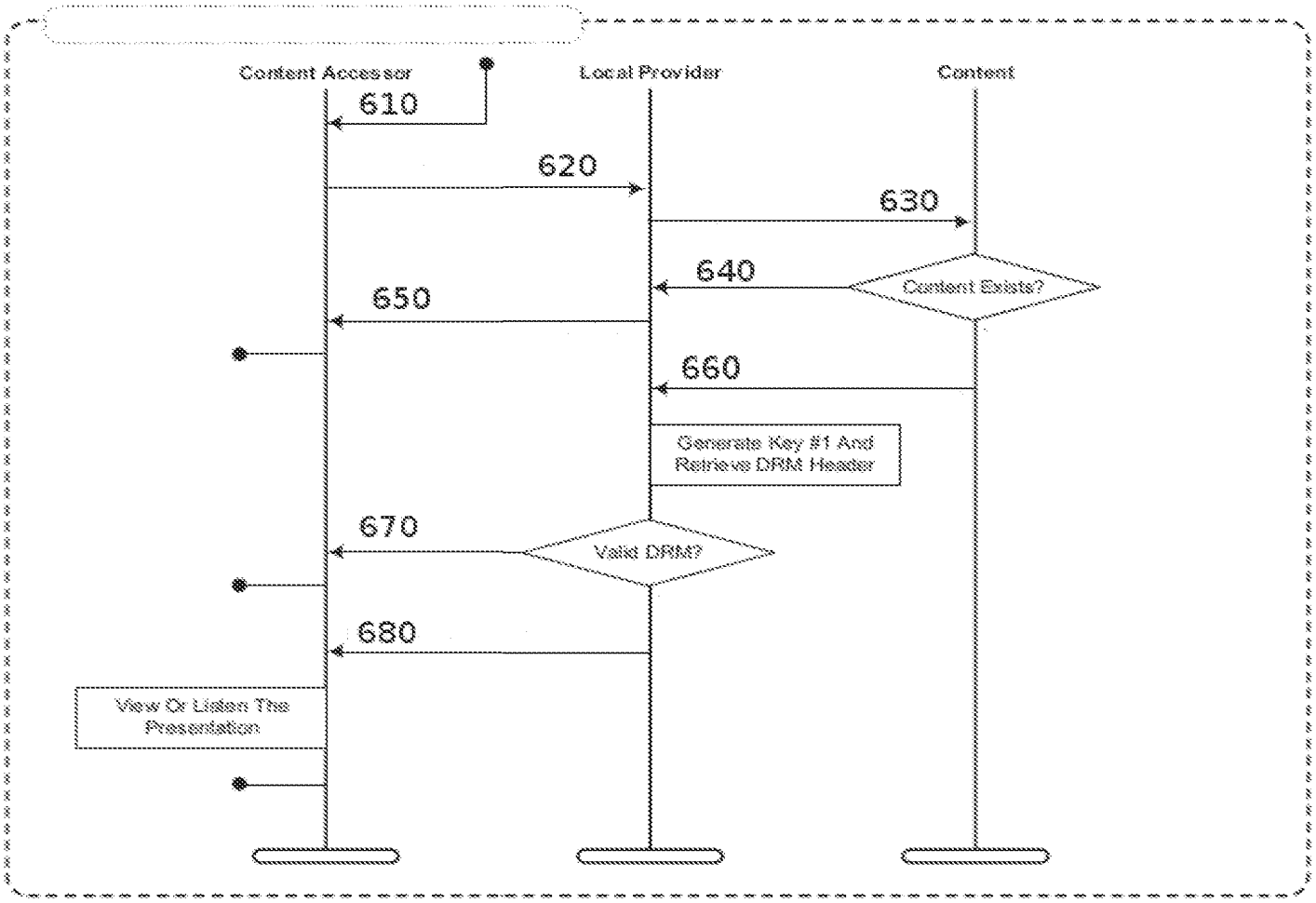

Content Accessor
Local Provider
Content
610
620
630
640
Content Exists?
650
660
Generate Key #1 And
Retrieve DRM Header
670
Valid DRM?
680
View Or Listen The
Presentation

FIGURE 6

FIGURE 7

0 = no encryption, only header
1 = only key #1
2 = keys #1 and #2
3 = keys #1 and #3, where key #3 is prepared with key #2
4 = keys #1, #2 and #3
5 = keys #1, #2 and #3, where key #3 is prepared with key #2

FIGURE 8

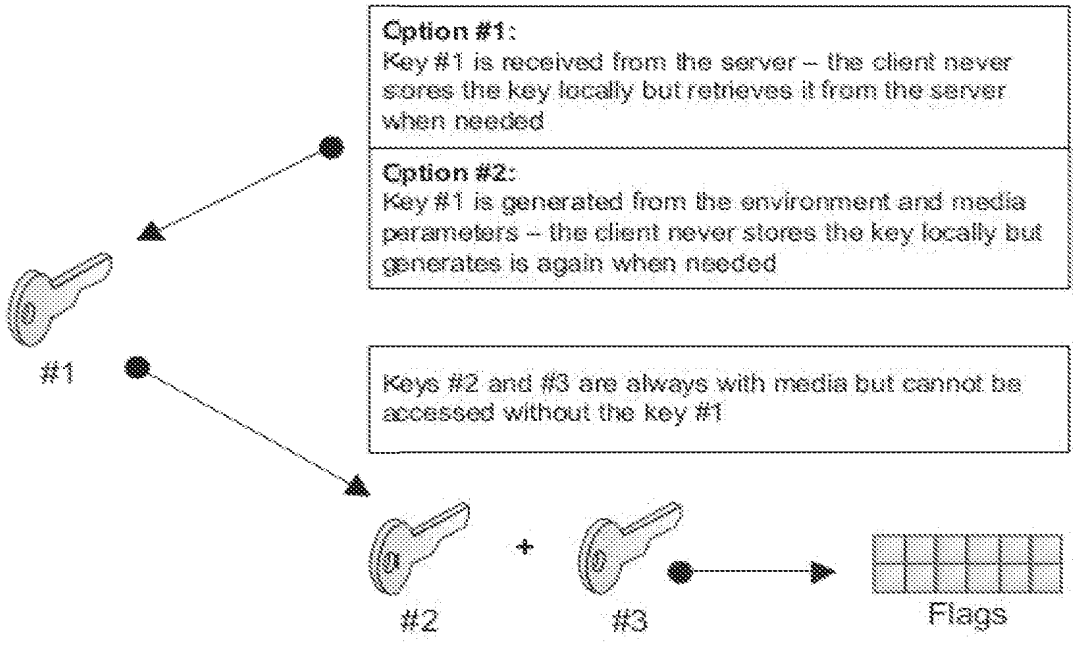


FIGURE 9

External DRM layer (always 256bit AES with external key)
* cannot be opened independently by the client

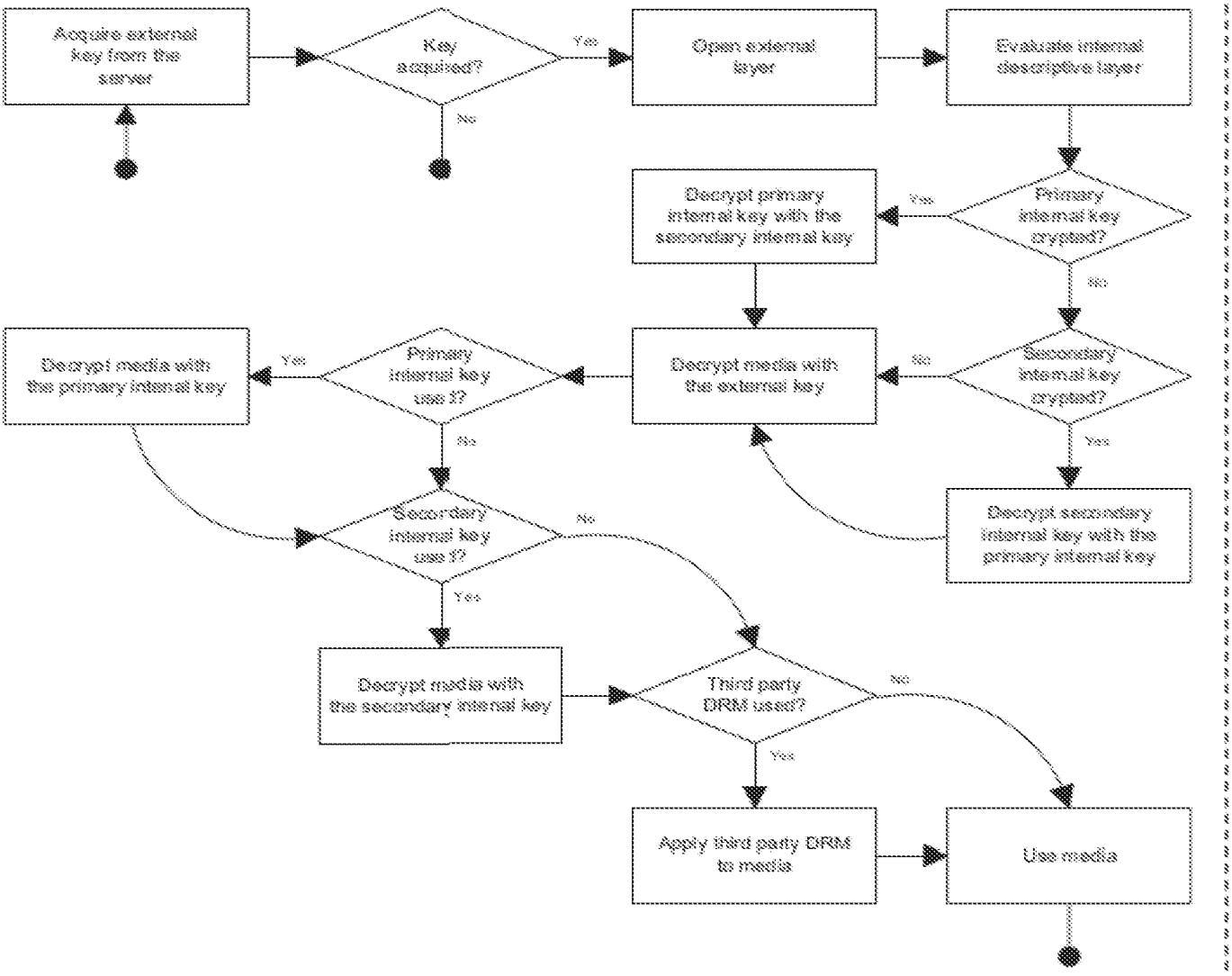
Internal DRM descriptive layer
* contains the instructions about the remaining cryptograph methods

Primary DRM cryptograph layer (256bit AES)
* primary internal cryptograph key may be encrypted with the secondary internal cryptograph layer key

Secondary DRM cryptograph layer (256bit AES)
* secondary internal cryptograph key may be encrypted with the primary internal cryptograph layer key

Media layer
* is always encrypted with the external DRM layer and may be encrypted with primary and/or secondary DRM internal layer as well
* media-specific third-party DRM may be used in addition to Cloud Content DRM

FIGURE 10



Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	A method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Filer:	Joshua Paul Wert/Ross Worrell
Attorney Docket Number:	SCIH 2 US

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Utility filing Fee (Electronic filing)	4011	1	70	70
Utility Search Fee	2111	1	300	300
Utility Examination Fee	2311	1	360	360
Pages:				
Claims:				
Miscellaneous-Filing:				
Late Filing Fee for Oath or Declaration	2051	1	70	70
Petition:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**800**

Electronic Acknowledgement Receipt

EFS ID:	21151029
Application Number:	14591952
International Application Number:	
Confirmation Number:	5164
Title of Invention:	A method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Customer Number:	95002
Filer:	Joshua Paul Wert/Ross Worrell
Filer Authorized By:	Joshua Paul Wert
Attorney Docket Number:	SCIH 2 US
Receipt Date:	08-JAN-2015
Filing Date:	
Time Stamp:	09:07:17
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$800
RAM confirmation Number	6614
Deposit Account	
Authorized User	

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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal of New Application	SCIH2US_2015-01-08_AIA0015_New_application_filing.pdf	106519 0776ae6e01269a0bbe73d0bc4f2f7b2c8412688f	no	1
Warnings:					
Information:					
2	Application Data Sheet	SCIH2US_2015-01-08_ADS.pdf	91332 e83d2a8e0764fcc4be55464ab231d1414b56c6c9	no	5
Warnings:					
Information:					
This is not an USPTO supplied ADS fillable form					
3		SCIH2US_2015-01-08_Specification.pdf	154161 130226990f76faa20ecc378ed54b77f848fd7da6	yes	23

Multipart Description/PDF files in .zip description

Document Description	Start	End
Specification	1	19
Claims	20	22
Abstract	23	23

Warnings:					
Information:					
4	Drawings-other than black and white line drawings	SCIH2US_2015-01-08_Drawings.pdf	336659 29326e15968addad86b5b33af55cb4393c73f558	no	8
Warnings:					
Information:					
5	Fee Worksheet (SB06)	fee-info.pdf	36717 00c45fdad28339ae4e4e7a145beb5b401b4f5d0c	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	725388		

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

SCORE Placeholder Sheet for IFW Content

Application Number: 14591952 Document Date: 01/08/2015

The presence of this form in the IFW record indicates that the following document type was received in electronic format on the date identified above. This content is stored in the SCORE database.

Since this was an electronic submission, there is no physical artifact folder, no artifact folder is recorded in PALM, and no paper documents or physical media exist. The TIFF images in the IFW record were created from the original documents that are stored in SCORE.

- Drawing

At the time of document entry (noted above):

- USPTO employees may access SCORE content via eDAN using the Supplemental Content tab, or via the SCORE web page.
- External customers may access SCORE content via PAIR using the Supplemental Content tab.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/591,952	01/08/2015	Lauri Valjakka	SCIH 2 US

CONFIRMATION NO. 5164

95002
Seppo Laine Oy
Joshua P. Wert
Itamerenkatu 3B
Helsinki, FI00180
FINLAND

FORMALITIES LETTER

OC000000072913542

Date Mailed: 01/20/2015

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

Items Required To Avoid Abandonment:

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing.

Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- Additional claim fees of $ **210** as a small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due.

SUMMARY OF FEES DUE:

The fee(s) required within **TWO MONTHS** from the date of this Notice to avoid abandonment is/are itemized below. Small entity discount is in effect. If applicant is qualified for micro entity status, an acceptable Certification of Micro Entity Status must be submitted to establish micro entity status. (See 37 CFR 1.29 and forms PTO/SB/15A and 15B.)

- $ **210** for **1** independent claims over 3.
- $(**0**) previous unapplied payment amount.
- $ **210** TOTAL FEE BALANCE DUE.

Items Required To Avoid Processing Delays:

Applicant is notified that the above-identified application contains the deficiencies noted below. No period for reply is set forth in this notice for correction of these deficiencies. However, if a deficiency relates to the inventor's oath or declaration, the applicant must file an oath or declaration in compliance with 37 CFR 1.63, or a substitute statement in compliance with 37 CFR 1.64, executed by or with respect to each actual inventor no later than the expiration of the time period set in the "Notice of Allowability" to avoid abandonment. See 37 CFR 1.53(f).

- A properly executed inventor's oath or declaration has not been received for the following inventor(s):
  Lauri Valjakka
  Jukka-Pekka Jussila
  Jari Tapio

Replies must be received in the USPTO within the set time period or must include a proper Certificate of Mailing or Transmission under 37 CFR 1.8 with a mailing or transmission date within the set time period. For more information and a suggested format, see Form PTO/SB/92 and MPEP 512.

Replies should be mailed to:

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web, including a copy of this Notice and selecting the document description "Applicant response to Pre-Exam Formalities Notice". https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at http://www.uspto.gov/ebc.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

/afessehaye/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
14/591,952	01/08/2015	2431	800	SCIH 2 US	9	4

CONFIRMATION NO. 5164

95002
Seppo Laine Oy
Joshua P. Wert
Itamerenkatu 3B
Helsinki, FI00180
FINLAND

FILING RECEIPT



Date Mailed: 01/20/2015

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Inventor(s)

Lauri Valjakka, Lappeenranta, FINLAND;
Jukka-Pekka Jussila, Lappeenranta, FINLAND;
Jari Tapio, Lappeenranta, FINLAND;

Applicant(s)

SC Intelligent Holding Ltd., Lappeenranta, FINLAND

Power of Attorney: None

Domestic Applications for which benefit is claimed - None.
A proper domestic benefit claim must be provided in an Application Data Sheet in order to constitute a claim for domestic benefit. See 37 CFR 1.76 and 1.78.

Foreign Applications (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.)
FINLAND 20145013 01/08/2014 No Access Code Provided

Permission to Access - A proper **Authorization to Permit Access to Application by Participating Offices** (PTO/SB/39 or its equivalent) has been received by the USPTO.

If Required, Foreign Filing License Granted: 01/16/2015
The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 14/591,952**
Projected Publication Date: 07/09/2015
Non-Publication Request: No
Early Publication Request: No

**** SMALL ENTITY ****

Title

Method of and system for providing access to access restricted content to a user

Preliminary Class

726

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

SelectUSA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop technology, manufacture products, deliver services, and grow your business, visit http://www.SelectUSA.gov or call +1-202-482-6800.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 14/591,952

APPLICATION AS FILED - PART I

	(Column 1)	(Column 2)	SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE($)	FEE($)		RATE($)	FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	70		N/A	
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	300		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	360		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	9 minus 20 =	*	x 40 =	0.00	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	4 minus 3 =	* 1	x 210 =	210			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	940		TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)	SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE($)	ADDITIONAL FEE($)		RATE($)	ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1)		(Column 2)	(Column 3)					
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE($)	ADDITIONAL FEE($)		RATE($)	ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.

PTO/SB/08a (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 1

Complete if Known	
Application Number	14/591,952
Filing Date	January 08, 2015
First Named Inventor	VALJAKKA, Lauri
Art Unit	
Examiner Name	
Attorney Docket Number	SCIH 2 US

U.S. PATENT DOCUMENTS

Examiner initial *	Cite No.	Document Number Number - Kind Code [2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US-2004139315 - A1	07-15-2004	TOKUTANI TAKASHI et al.	
	2	US-2005039034 - A1	02-17-2005	DOYLE RONALD P et al.	
	3	US-2005273629 - A1	12-08-2005	ABRAMS WILLIAM M et al.	
	4	US-2010250388 - A1	09-30-2010	LEE SANG CHEOL	
	5	US-2012221853 - A1	08-30-2012	WINGERT CHRISTOPHER R et al.	
	6	US-2013174272 - A1	07-04-2013	CHEVALIER VINCENT LE et al.	
	7	US-8184811 - B1	05-22-2012	PATTEN CHRISTOPHER et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initial *	Cite No. 1	Foreign Patent Document Country [3] Code Number [4] Kind Code (if known) [5]	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	8	CN 101739522 - B	01-02-2013	ZTE CORP		
	9	KR 20090000042 - A	01-07-2009	KT CORP		
	10	EP 2273409 - A2	01-12-2011	DISNEY ENTPR INC		

Examiner Signature		Date Considered	

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not Considered. Include copy of this form with next communication to applicant. 1. Applicant´s unique citation design number (optional). 2 See Kinds Codes of USPTO patent Documents. at www.uspto.gov or MPEP 901.04. 3. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4. For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assisstance in completing the form, call 1-800-PTO-9199 (1-800-786.9199) and select option 2.

Electronic Patent Application Fee Transmittal

Application Number:	14591952
Filing Date:	08-Jan-2015
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Filer:	Joshua Paul Wert/Ross Worrell
Attorney Docket Number:	SCIH 2 US

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Independent Claims in Excess of 3	2201	1	210	210
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Extension - 2 months with $0 paid	2252	1	300	300
Miscellaneous:				
			Total in USD ($)	**510**

Electronic Acknowledgement Receipt

EFS ID:	22395452
Application Number:	14591952
International Application Number:	
Confirmation Number:	5164
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Customer Number:	95002
Filer:	Joshua Paul Wert/Ross Worrell
Filer Authorized By:	Joshua Paul Wert
Attorney Docket Number:	SCIH 2 US
Receipt Date:	20-MAY-2015
Filing Date:	08-JAN-2015
Time Stamp:	05:01:37
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$510
RAM confirmation Number	7071
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Applicant Response to Pre-Exam Formalities Notice	SICH2US_2015-05-20_Response_NOMP.pdf	136960 d405279651fee8d19179a7ba5bf5286da1527b6b	no	2
Warnings:					
Information:					
2	Oath or Declaration filed	SICH2US_2015-05-20_DECLARATION_SIGNED.pdf	639018 dee8bb8b577bd3212b9efa0f5a84dfacc1e88c3f	no	3
Warnings:					
Information:					
3	Extension of Time	SICH2US_2015-05-20_AIA0022_Extension.pdf	107288 11d2f17c7ffbacf23e8231f22c1c67548473c271	no	1
Warnings:					
Information:					
4	Transmittal Letter	SICH2US_2015-05-20_IDS_submission.pdf	120952 f97d16954b467adb766ff332ab613dad5a32cae5	no	4
Warnings:					
Information:					
5	Information Disclosure Statement (IDS) Form (SB08)	SICH2US_2015-05-20_IDS_form.pdf	76120 a02262d18db5b553cb7b0a083842026fe637929d	no	1
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
6	Foreign Reference	EP2273409A2.pdf	2004264 22783b6af916deef7f4793c4924dd6cd50a0569e	no	27
Warnings:					
Information:					
7	Foreign Reference	KR20090000042A.pdf	2486843 130d260e618b67c69cc40685c95d796c0bcc5223	no	18
Warnings:					
Information:					

8	Foreign Reference	CN101739522B.pdf	2175650 e5aac814e2fa134ea90866e6fe468d373f9c790e	no	15
Warnings:					
Information:					
9	Fee Worksheet (SB06)	fee-info.pdf	32093 e77976015265e8b9e9b69d749b954e5ffc15439e	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	7779188	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	14/591,952
Confirmation No.	:	5164
Applicant	:	SC Intelligent Holding Ltd.
Filed	:	January 8, 2015
TC/AU	:	Not Yet Assigned
Examiner	:	Not Yet Assigned
Attorney Docket No.	:	SCIH 2 US

M/S Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 USC 371

Sir:

In response to the NOTIFICATION OF MISSING REQUIREMENTS mailed 2015-05-20the Applicant herewith submits the following documents:

☒ A declaration of the inventors (3 pages).

☐ A power of attorney of the inventors (pages).

☒ Additional document(s): IDS (65 pages)
Extension of time (1 page)

☐ The fee of $140.00 for late submission of the declaration as set forth in 37 CFR 1.492(h) is submitted with the present filing.

☒ The additional fee(s) of $ 210 as required by the notification is submitted with the present filing.

This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S. C. 371. This response is believed fulfil all of the outstanding requirements for acceptance under 35 U.S.C. 371 as set forth in the Notification of Missing Requirements attached.

Respectfully submitted,

/ Joshua P. Wert Reg. No. 65880/

Joshua P. Wert
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Tel. (US) +1 571-480-8372
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Fax +358 9 6859 5610
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May 20, 2015

PTO/AIA/01 (06-12)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of invention	A method of and system for providing access to access restricted content to a user

As the below named inventor, I hereby declare that:

This declaration is directed to: ☐ The attached application, or

☒ United States application or PCT international application number 14/591,952

filed on 2015-01-08

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Lauri Valjakka Date (Optional): 12/1/2014

Signature:

Note: An application data sheet (PTO/AIA/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/AIA/81 (08-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
As for the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	A method of and system for providing access to accesa restricted content to a user

As the below named inventor, I hereby declare that:

This declaration is directed to:
- ☐ The attached application, or
- ☒ United States application or PCT international application number 14/691,952 filed on 2015-01-08

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Jukka-Pekka Jussila Date (Optional):

Signature:

Note: An application data sheet (PTO/SB/14 or equivalent), indicating naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/81 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. This information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/AIA/01 (06-12)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	A method of and system for providing access to access restricted content to a user

As the below named inventor, I hereby declare that:

This declaration is directed to:

☐ The attached application, or

☒ United States application or PCT international application number 14/591,952

filed on 2015-01-08

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Jari Tapio Date (Optional):

Signature:

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/AIA/22 (03-13)
Approved for use through 7/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)

Docket Number (Optional): SCIH 2 US

Application Number: 14/591,952

Filed: January 8, 2015

For: A method of and system for providing access to access restricted content to a user

Art Unit:

Examiner:

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

		Fee	Small Entity Fee	Micro Entity Fee	
☐	One month (37 CFR 1.17(a)(1))	$200	$100	$50	$
☑	Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$ 300
☐	Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$
☐	Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
☐	Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

☑ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☐ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number _____.

☑ Payment made via EFS-Web.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant.

☑ attorney or agent of record. Registration number 73276.

☐ attorney or agent acting under 37 CFR 1.34. Registration number _____.

/Matthew A. Swanson Reg. No. 73276/ — Signature

2015-05-20 — Date

Matthew A. Swanson — Typed or printed name

571-281-4850 — Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☑ * Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	:	14/591,952
Applicant	:	SC Intelligent Holding Ltd.
Filed	:	January 8, 2015
TC/AU	:	
Examiner	:	
Attorney Docket No.	:	SCIH 2 US

M/S Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

☒ The patents, publications, or other information submitted for consideration by the Office are listed on the PTO-SB08(s) attached hereto.

II. COPIES OF CITED DOCUMENTS

☒ Copies of all of the foreign patent documents and non-patent literature are included.

☐ Copies of all of the foreign patent documents and non-patent literature are included except for the following for the corresponding indicated reasons:

III. CONCISE EXPLANATION OF THE RELEVANCE

☒ For Documents in the English language listed on the attached PTO-SB08(s) it is believed that no statement of relevancy is required.

☐ The following foreign language documents correspond to the indicated English language documents:

Foreign language document	Corresponding English language document

Therefore, it is believed that this in conjunction with the indicated English language documents satisfies the relevancy requirement.

☐ An English language version of a search report or action that indicates the degree of relevance found by the foreign office is attached, it is believed that this satisfies the requirement for a concise explanation of the corresponding documents. See MPEP 609(III)(A)(3).

☐ A concise explanation of foreign language documents not covered by an indication above is as follows:

* 0 Additional page(s) of explanation are attached.

IV. STATEMENT UNDER 37 CFR 1.97(e)

☐ I hereby state that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this statement.

☐ I hereby state that no item of information in the Information Disclosure Statement filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, no item of information contained in this information Disclosure Statement was known to any individual designated in 37 CFR 1.56(c) more than 3 months prior to the filing of this information Disclosure Statement.

* When no box has been checked in this section then no statement is being made.

V. FEES

☐ This Information Disclosure Statement is being filed concurrently with the filing of a new patent application or RCE, therefore no fee is required.

☒ This Information Disclosure Statement is being filed within three months of the date of entry of the national stage as set forth in §1.491 in an international application (37 C.F.R. §1.97(b)(2)), within three months from the filing of a national application or before the mailing date of a first Office action on the merits in an RCE, national application or national stage entry of an international application, therefore no fee is required.

☐ This Information Disclosure Statement is being filed before the mailing date of a Final Office Action under 37 C.F.R. §1.113 or before the mailing date of a Notice of Allowance under 37 C.F.R. §1.311.

☐ a fee as required by 37 C.F.R. §1.17(p) is attached.

☐ a statement in accordance with 37 CFR 1.97(e) as indicated above is attached.

☐ This Information Disclosure Statement is being filed on or after the mailing date of a Final Office Action under 37 C.F.R. §1.113 or a Notice of Allowance under 37 C.F.R. §1.311 but before or simultaneously with the payment of an issue fee.

☐ [a fee as required by 37 C.F.R. §1.17(p) and a statement in accordance with 37 CFR 1.97(e) as indicated above is attached.

If the Examiner has any questions concerning this Information Disclosure statement they are requested to contact the undersigned. If it is determined that this Information Disclosure Statement has been filed under the wrong rule, the Office is requested to consider this statement under the proper rule.

Respectfully submitted,

/ Joshua P. Wert Reg. No. 65880/

Joshua P. Wert
Reg. No. 65880
Seppo Laine Oy
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May 20, 2015

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 14/591,952

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	70		N/A	
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	300		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	360		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	9 minus 20 =	*	x 40 =	0.00	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	4 minus 3 =	* 1	x 210 =	210			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	940		TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE($)	ADDITIONAL FEE($)		RATE($)	ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
14/591,952	01/08/2015	2431	1010	SCIH 2 US	9	4

CONFIRMATION NO. 5164
UPDATED FILING RECEIPT

95002
Seppo Laine Oy
Joshua P. Wert
Itamerenkatu 3B
Helsinki, FI00180
FINLAND

OC000000075379155

Date Mailed: 05/26/2015

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Inventor(s)

Lauri Valjakka, Lappeenranta, FINLAND;
Jukka-Pekka Jussila, Lappeenranta, FINLAND;
Jari Tapio, Lappeenranta, FINLAND;

Applicant(s)

SC Intelligent Holding Ltd., Lappeenranta, FINLAND;

Power of Attorney: None

Domestic Applications for which benefit is claimed - None.
A proper domestic benefit claim must be provided in an Application Data Sheet in order to constitute a claim for domestic benefit. See 37 CFR 1.76 and 1.78.

Foreign Applications (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.)
FINLAND 20145013 01/08/2014 No Access Code Provided

Permission to Access - A proper **Authorization to Permit Access to Application by Participating Offices** (PTO/SB/39 or its equivalent) has been received by the USPTO.

If Required, Foreign Filing License Granted: 01/16/2015
The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 14/591,952**
Projected Publication Date: 07/09/2015
Non-Publication Request: No
Early Publication Request: No

**** SMALL ENTITY ****

Title

Method of and system for providing access to access restricted content to a user

Preliminary Class

726

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

SelectUSA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop technology, manufacture products, deliver services, and grow your business, visit http://www.SelectUSA.gov or call +1-202-482-6800.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/591,952	01/08/2015	Lauri Valjakka	SCIH 2 US

CONFIRMATION NO. 5164

PUBLICATION NOTICE

95002
Seppo Laine Oy
Joshua P. Wert
Itamerenkatu 3B
Helsinki, FI00180
FINLAND

OC000000076185369

Title: Method of and system for providing access to access restricted content to a user

Publication No.US-2015-0193601-A1
Publication Date:07/09/2015

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently http://pair.uspto.gov/. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Managment, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

Doc Code: PA..
Document Description: Power of Attorney

PTO/AIA/82A (07-13)
Approved for use through 11/30/2013. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

NOTE: This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5, unless the application number and filing date are identified in the Power of Attorney by Applicant form. If neither form PTO/AIA/82A nor form PTO/AIA/82B identifies the application to which the Power of Attorney is directed, the Power of Attorney will not be recognized in the application.

Application Number	14/591,952
Filing Date	2015-01-08
First Named Inventor	Lauri Valjakka
Title	A method of and system for providing access to access restricted content to a user
Art Unit	
Examiner Name	
Attorney Docket Number	SCIH 2 US

SIGNATURE of Applicant or Patent Practitioner

Signature	/Joshua P. Wert Reg. No. 65880/	Date (Optional)	
Name	Joshua P. Wert	Registration Number	65880
Title (if Applicant is a juristic entity)			

Applicant Name (if Applicant is a juristic entity)	

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.

☑ *Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.191, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Doc Code: PA...
Document Description: Power of Attorney

PTO/AIA/81 (04-13)
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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.

Application Number	Filing Date

(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)

☑ I hereby appoint the Patent Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. 95002

OR

☐ I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the patent application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)

Please recognize or change the correspondence address for the application identified in the attached transmittal letter or the boxes above to:

☑ The address associated with the above-mentioned Customer Number

OR

☐ The address associated with Customer Number:

OR

Firm or Individual Name	
Address	
City	State / Zip
Country	
Telephone	Email

I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box).

SC Intelligent Holding Ltd.

☐ Inventor or Joint Inventor (title not required below)

☐ Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)

☑ Assignee or Person to Whom the Inventor is Under An Obligation to Assign (provide signer's title if applicant is a juristic entity)

☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature	Date (Optional) 12.1.2015
Name	
Title	CEO

NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33, See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.

☑ Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.31, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public which is to be filed by the applicant to prosecute an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/AIA/96 (08-12)
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STATEMENT UNDER 37 CFR 3.73(c)

Applicant/Patent Owner: SC Intelligent Holding Ltd.

Application No./Patent No.: 14/591,952 Filed/Issue Date: 2015-01-08

Titled: A method of and system for providing access to access restricted content to a user

SC Intelligent Holding Ltd., a corporation

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that, for the patent application/patent identified above, it is (choose **one** of options 1, 2, 3 or 4 below):

1. ☑ The assignee of the entire right, title, and interest.

2. ☐ An assignee of less than the entire right, title, and interest (check applicable box):

   ☐ The extent (by percentage) of its ownership interest is _____%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.

   ☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

   Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:

   Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ The recipient, via a court proceeding or the like (*e.g.*, bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose **one** of options A or B below):

A. ☑ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 035736, Frame 0913, or for which a copy thereof is attached.

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

   1. From: _____ To: _____

      The document was recorded in the United States Patent and Trademark Office at

      Reel _____, Frame _____, or for which a copy thereof is attached.

   2. From: _____ To: _____

      The document was recorded in the United States Patent and Trademark Office at

      Reel _____, Frame _____, or for which a copy thereof is attached.

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

STATEMENT UNDER 37 CFR 3.73(c)

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

4. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

5. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

6. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☑ As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/Joshua P. Wert Reg. No 65880/	2015-07-15
Signature	Date
Joshua P. Wert	65880
Printed or Typed Name	Title or Registration Number

[Page 2 of 2]

Electronic Acknowledgement Receipt

EFS ID:	22919265
Application Number:	14591952
International Application Number:	
Confirmation Number:	5164
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Customer Number:	95002
Filer:	Joshua Paul Wert/Ross Worrell
Filer Authorized By:	Joshua Paul Wert
Attorney Docket Number:	SCIH 2 US
Receipt Date:	15-JUL-2015
Filing Date:	08-JAN-2015
Time Stamp:	03:19:33
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	SICH2US_2015-07-15_SB0021_General_transmittal.pdf	146598 2f8eb8d0c0ece419f4a47d3b279d8e6ad0770088	no	1

Warnings:	
Information:	

2		SICH2US_2015-07-15_POA_SIGNED.pdf	611385 6ac56c802cba1572b14d04dd378ed6c4fcca5ab8	yes	6

Multipart Description/PDF files in .zip description		
Document Description	**Start**	**End**
Transmittal Letter	1	2
Power of Attorney	3	4
Assignee showing of ownership per 37 CFR 3.73	5	6

Warnings:	
Information:	
Total Files Size (in bytes):	757983

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Doc Code: TRAN.LET

Document Description: Transmittal Letter

PTO/SB/21 (07-09)
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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission	7

Application Number	14/591,952
Filing Date	2015-01-08
First Named Inventor	VALJAKKA, Lauri
Art Unit	
Examiner Name	
Attorney Docket Number	SCIH 2 US

ENCLOSURES *(Check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☐ Amendment/Reply
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Reply to Missing Parts/ Incomplete Application
  - ☐ Reply to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☑ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) _____
  - ☐ Landscape Table on CD
- ☐ After Allowance Communication to TC
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- ☐ Proprietary Information
- ☐ Status Letter
- ☐ Other Enclosure(s) (please Identify below):

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Seppo Laine Oy		
Signature	/Joshua P. Wert Reg. No. 65880/		
Printed name	Joshua P. Wert		
Date	2015-07-15	Reg. No.	65880

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name		Date	

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	:	14/591,952 Confirmation No. : 5164
Applicant	:	SC Intelligent Holding Ltd.
Filed	:	2015-01-08
TC/AU	:	Not Yet Assigned
Examiner	:	Not Yet Assigned
Attorney Docket No.	:	SCIH 2 US

M/S Preliminary Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

NEW POWER OF ATTORNEY AND CHANGE OF ADDRESS FILED

Sir:

In regards to the present application, a new Power of Attorney and corresponding change of correspondence address is herein submitted. Additionally, a statement under 37 CFR 3.73(c) is herein submitted.

Lauri Valjakka, Chief Executive Officer (CEO), is authorized to act on behalf of the assignee of the entire interest, SC Intelligent Holding Ltd., in accordance with 3.73(d)(1).

Please send all further communications to the address for customer number 95002 as indicated in the attached signed Power of Attorney form.

Respectfully submitted,

/Joshua P. Wert Reg. No. 65880/

Joshua P. Wert
Reg. No. 65880
Seppo Laine Oy
Itämerenkatu 3 B
FIN-00180 Helsinki, Finland

Tel. (US) +1 571-480-8372
Tel. +358 9 6859 5643
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e-mail: Joshua.Wert@Seppolaine.fi

July 15, 2015

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/591,952	01/08/2015	Lauri Valjakka	SCIH 2 US

CONFIRMATION NO. 5164

95002
Seppo Laine Oy
Joshua P. Wert
Itamerenkatu 3B
Helsinki, FI00180
FINLAND

POA ACCEPTANCE LETTER

OC000000076469440

Date Mailed: 07/23/2015

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 07/15/2015.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/nhassani/

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/591,952	01/08/2015	Lauri Valjakka	SCIH 2 US	5164

95002 7590 06/21/2016

Seppo Laine Oy
Itamerenkatu 3 A
Helsinki, FI00180
FINLAND

EXAMINER
BAYOU, YONAS A

ART UNIT	PAPER NUMBER
2434	

MAIL DATE	DELIVERY MODE
06/21/2016	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 14/591,952	Applicant(s) VALJAKKA ET AL.	
	Examiner YONAS BAYOU	Art Unit 2434	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01/08/2015*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-9* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☐ Claim(s) _____ is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☒ Claim(s) *1-9* are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *05/20/2015*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the application 14/591,952 filed on 01/08/2015.

2. Claims 1-9 have been examined and are pending in this application.

Notice of Pre-AIA or AIA Status

3. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Election/Restrictions

4. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-5, drawn to receiving a content request message, the content request message including a content identifier of an access restricted content; causing a first determination to be performed to yield a positive or a negative result; obtaining, in response to the first determination yielding a positive result, a first digital rights management key; causing a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, causing access to the access restricted content to be provided to the user, classified in G06F21/6245 or G06F21/6218 or G06F21/6209 or G06F21/62 or H04L63/102 or GO6F21/10.

II. Claims 6-9, drawn to obtain an access restricted content from at least one of a content database and a content providing server; obtain a first digital rights management key;

derive, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content, and derive, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key, classified in H04L9/00 or H04L9/06 or H04L9/0662 or H04L9/08 or H04L9/0861.

5. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and/or examination burden if restriction were not required because one or more of the following reasons apply:

the inventions have acquired a separate status in the art in view of their different classification,

the inventions have acquired a separate status in the art due to their recognized divergent subject matter,

the inventions require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search strategies or search queries).

Applicant is advised that the reply to this requirement to be complete must include (i) an election of an invention to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected invention**.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103 or pre-AIA 35 U.S.C. 103(a) of the other invention.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YONAS BAYOU whose telephone number is (571)272-7610. The examiner can normally be reached on m-f,7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571-272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YONAS BAYOU/
Primary Examiner, Art Unit 2434
06/15/2016

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /Y.B./

PTO/SB/08a (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 1

Complete if Known	
Application Number	14/591,952
Filing Date	January 08, 2015
First Named Inventor	VALJAKKA, Lauri
Art Unit	2434
Examiner Name	Yonas Bayou
Attorney Docket Number	SCIH 2 US

U.S. PATENT DOCUMENTS

Examiner initial *	Cite No.	Document Number Number - Kind Code [2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US-2004139315 - A1	07-15-2004	TOKUTANI TAKASHI et al.	
	2	US-2005039034 - A1	02-17-2005	DOYLE RONALD P et al.	
	3	US-2005273629 - A1	12-08-2005	ABRAMS WILLIAM M et al.	
	4	US-2010250388 - A1	09-30-2010	LEE SANG CHEOL	
	5	US-2012221853 - A1	08-30-2012	WINGERT CHRISTOPHER R et al.	
	6	US-2013174272 - A1	07-04-2013	CHEVALIER VINCENT LE et al.	
	7	US-8184811 - B1	05-22-2012	PATTEN CHRISTOPHER et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initial *	Cite No. 1	Foreign Patent Document Country [3] Code Number [4] Kind Code (if known) [5]	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	8	CN 101739522 - B	01-02-2013	ZTE CORP		
	9	KR 20090000042 - A	01-07-2009	KT CORP		
	10	EP 2273409 - A2	01-12-2011	DISNEY ENTPR INC		

Examiner Signature	/Yonas Bayou/	Date Considered	06/17/2016

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not Considered. Include copy of this form with next communication to applicant. 1. Applicant's unique citation design number (optional). 2 See Kinds Codes of USPTO patent Documents. at www.uspto.gov or MPEP 901.04. 3. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4. For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assisstance in completing the form, call 1-800-PTO-9199 (1-800-786.9199) and select option 2.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14591952	VALJAKKA ET AL.
	Examiner	**Art Unit**
	YONAS BAYOU	2434

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	06/14/2016								
	1	÷								
	2	÷								
	3	÷								
	4	÷								
	5	÷								
	6	÷								
	7	÷								
	8	÷								
	9	÷								

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	: 14/591,952	Confirmation No. : 5164
Applicant	: Lauri Valjakka	
Filed	: 01/08/2015	
TC/AU	: 2434	
Examiner	: Bayou, Yonas A	
Attorney Docket No.	: SCIH 2 US	

MS Amendments
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO ELECTION/RESTRICTION REQUIREMENT

With regards to the Office Action mailed June 21, 2016, the Applicant elects Group II, which is drawn to Claims 6 – 9, without traverse.

The Applicant believes that that present application is in condition for allowance. Notice of the same is earnestly solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Matthew A. Swanson, Reg. No. 73276 at (571) 281-4850, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Respectfully submitted,

/ Matthew A. Swanson Reg. No. 73276/

Matthew A. Swanson
Reg. No. 73276
Seppo Laine Oy
Itämerenkatu 3 A
FIN-00180 Helsinki, Finland
Tel. (US) +1 571-281-4850
e-mail: matthew.swanson@seppolaine.fi

2016-08-30

PTO/AIA/22 (03-13)
Approved for use through 7/31/2016. OMB 0651-0031
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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)

Docket Number (Optional): SCIH 2 US

Application Number: 14/591,952

Filed: 2015-01-08

For: A method of and system for providing access to access restricted content to a user

Art Unit: 2434

Examiner: BAYOU, Yonas A.

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

		Fee	Small Entity Fee	Micro Entity Fee	
☑	One month (37 CFR 1.17(a)(1))	$200	$100	$50	$ 100
☐	Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$
☐	Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$
☐	Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
☐	Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

☑ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☐ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number _____.

☑ Payment made via EFS-Web.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant.

☑ attorney or agent of record. Registration number 73276.

☐ attorney or agent acting under 37 CFR 1.34. Registration number _____.

/Matthew A. Swanson Reg. No. 73276/ — Signature

2016-09-13 — Date

Matthew A. Swanson — Typed or printed name

571-281-4850 — Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☑ * Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	14591952
Filing Date:	08-Jan-2015
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Filer:	Matthew Alan Swanson/Ross Worrell
Attorney Docket Number:	SCIH 2 US

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 1 month with $0 paid	2251	1	100	100
Miscellaneous:				
			Total in USD ($)	**100**

Electronic Acknowledgement Receipt

EFS ID:	26904013
Application Number:	14591952
International Application Number:	
Confirmation Number:	5164
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Customer Number:	95002
Filer:	Matthew Alan Swanson/Ross Worrell
Filer Authorized By:	Matthew Alan Swanson
Attorney Docket Number:	SCIH 2 US
Receipt Date:	13-SEP-2016
Filing Date:	08-JAN-2015
Time Stamp:	09:10:12
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$100
RAM confirmation Number	8349
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Response to Election / Restriction Filed	SCIH2US_2016-09-13_Response_restriction.pdf	65049 83f400a2a03dfc02e03622bc93262477173ea4fe	no	1
Warnings:					
Information:					
2	Extension of Time	SCIH2US_2016-09-13_AIA0022_Extension.pdf	134394 c1b4d6da7a7fc2a410e4af75f8c12fbe43216054	no	2
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30442 799557797eddcfeb82de1f946e4074769a9c100d	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	229885		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/591,952	01/08/2015	Lauri Valjakka	SCIH 2 US	5164

95002 7590 09/20/2016

Seppo Laine Oy
Itamerenkatu 3 A
Helsinki, FI00180
FINLAND

EXAMINER
BAYOU, YONAS A

ART UNIT	PAPER NUMBER
2434	

MAIL DATE	DELIVERY MODE
09/20/2016	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 14/591,952	Applicant(s) VALJAKKA ET AL.	
	Examiner YONAS BAYOU	Art Unit 2434	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09/13/2016*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *6-9* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *6-9* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *01/08/2015* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☒ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the restriction requirement filed on 09/13/2016.

2. In response to the restriction requirement, the Applicant has elected Group II, claims 6-9, without traverse for prosecution.

3. As per the response to election/restriction filed on 09/13/2016, claims 1-5 were not elected. Claims 6-9 are pending in this application.

Notice of Pre-AIA or AIA Status

4. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Claim Rejections - 35 USC § 112

5. The following is a quotation of 35 U.S.C. 112(b):

> (b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

> The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:
> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 6-8 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph,** as being indefinite for failing to particularly point out and distinctly claim

the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

7. Claim element "…configured to …" is a limitation that invokes 35 U.S.C. 112(f) or 35 U.S.C. 112 (pre-AIA), sixth paragraph. However, the written description fails to clearly link or associate the disclosed structure, material, or acts to the claimed function such that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function. The disclosure in paragraph 0057, for example, has provided evidence that states: "The processor 204 includes an interrogation module 26, a validation module 28, a calculation module 30 and a decryption module 32. Modules 26, 28, 30 and 32 may be comprised of software modules configured to cause processor 24 to perform corresponding functions, or the modules *may comprise hardware and software elements.*" which fails to clearly link or associate the disclosed structure, material, or acts to the claimed function.

Applicant may:

(a) Amend the claim so that the claim limitation will no longer be interpreted as a limitation under 35 U.S.C. 112(f) or 35 U.S.C. 112 (pre-AIA), sixth paragraph; or

(b) Amend the written description of the specification such that it clearly links or associates the corresponding structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or

(c) State on the record where the corresponding structure, material, or acts are set forth in the written description of the specification and linked or associated to the

claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. **Claims 6-9 are rejected under 35 U.S.C. 101** because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. Claims 6-9 are directed to *a method of using digital rights management keys to provide access to access restricted content,* which are an abstract idea in the field of An Idea Of Itself. The claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception as discussed below.

When considering subject matter eligibility under 35 U.S.C. 101, it must be determined whether the claim is directed to one of the four statutory categories of invention: process, machine, manufacture, or composition of matter **(Step 1: Yes)**. If the claim does fall within one of the statutory categories, it must then be determined whether the claim is directed to a judicial exception (i.e., law of nature, natural phenomenon, human being, or abstract idea), and if so, it must additionally be determined whether the claim is a patent-eligible application of the exception. If an abstract idea is present in the claim, any element of combination of elements in the claim must be sufficient to ensure

that the claim amounts to significantly more than the abstract idea itself. Examples of abstract ideas include fundamental economic practices, an idea itself, certain methods of organizing human activities, and mathematical relationships/formulas. Alice Corporation Pty. Ltd. v. CLS Bank International, et al, 573 U.S. (2014).

Claim 6 recites, an apparatus, comprising: obtain an access restricted content…, obtain a first DRM key …, drive encryption… and drive a content payload …. These steps describe the concept of *An Idea Of Itself*, which corresponds to concepts identified as abstract ideas by the courts, such as *using categories to organize and transmit information; organizing information through mathematical correlation and so on.* All of these concepts relate to *"An Idea Of Itself"* practice in which obtain an access restricted content…, obtain a first DRM key …, drive encryption… and drive a content payload …. are managed. The concept described in claims 6 and 9 are not meaningfully different than those *"An Idea Of Itself"* concepts found by the courts to be abstract ideas. As such, the description in claims 6-9 of *a method of using digital rights management keys to provide access to access restricted content* is an abstract idea **(Step 2A: Yes).**

The claim does not include additional elements that are sufficient to amount to significantly more than the judicial exception because the additional elements when considered both individually and as an ordered combination do not amount to significantly more than the abstract idea. The claim recites the additional limitations of a processor to perform the functions in claim 6. The processor is recited at a high level of generality and are recited as performing generic computer functions routinely used in computer applications. Generic computer components recited as performing generic

computer functions that are well-understood, routine and conventional activities amount to no more than implementing the abstract idea with a computerized system. Thus, taken alone, the additional elements do not amount to significantly more than the above-identified judicial exception (the abstract idea). Looking at the limitations as an ordered combination adds nothing that is not already present when looking at the elements taken individually. There is no indication that the combination of elements improves the functioning of a computer or improves any other technology. Their collective functions merely provide conventional computer implementation. Claims 6-9 are therefore not drawn to eligible subject matter as they are directed to an abstract idea without significantly more **(Step 2B: No;** *please see July 2015 update to the Interim Eligibility Guidance).*

Claim Rejections - 35 USC § 102

10. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

12. **Claims 6-9 are rejected under 35 U.S.C. 102 (a) (1)** as being anticipated by Kondareddy et al., Pub. No.: US 2012/0308008 (hereinafter Kondareddy).

Referring to claim 6, Kondareddy teaches an apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to:

obtain an access restricted content from at least one of a content database and a content providing server *(para. 0025 and fig. 1, video sources 102 and 103);*

obtain a first digital rights management key *(abstract, A content protection key, or a digital rights management (DRM) key);*

derive, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content *(paras. 0022, 0034 and fig. 2, usage of DRM key),* and

derive, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key *(paras. 0050-0052 and fig. 3b, recovering encrypted payload).*

Referring to claim 7, Kondareddy further teaches wherein the second digital rights management key is at least in part operable to obtain the content payload from the

access restricted content key *(paras. 0050-0052 and fig. 3b, recovering encrypted payload using DRM key).*

Referring to claim 8, Kondareddy further teaches wherein the apparatus is caused to obtain the first digital rights management key either by receiving it from a server or by generating it at least in part from at least one of environmental parameters and parameters of the access restricted content *(paras. 0022, 0034 and fig. 2, DRM key).*

Referring to claim 9, This claim is similar in scope to claim 6, and is therefore rejected under similar rationale.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YONAS BAYOU whose telephone number is (571)272-7610. The examiner can normally be reached on m-f,7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571-272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YONAS BAYOU/
Primary Examiner, Art Unit 2434
09/15/2016

Notice of References Cited	Application/Control No. 14/591,952	Applicant(s)/Patent Under Reexamination VALJAKKA ET AL.	
	Examiner YONAS BAYOU	Art Unit 2434	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2012/0308008 A1	12-2012	Kondareddy; Ragu (Raghunatha)	H04L63/0471	380/273
	B	US-				
	C	US-				
	D	US-				
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14591952	VALJAKKA ET AL.
	Examiner	Art Unit
	YONAS BAYOU	2434

CPC- SEARCHED		
Symbol	Date	Examiner
G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102	9/15/2016	

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102	9/15/2016	yb
East Search (such as Inventor's and Assignee's Name Search, CPC, Keywords), Inventor Search and Reviewed related Cases.	9/15/2016	yb

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

	/YONAS BAYOU/ Primary Examiner.Art Unit 2434

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BIB DATA SHEET

CONFIRMATION NO. 5164

SERIAL NUMBER	FILING or 371(c) DATE RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
14/591,952	01/08/2015	726	2434	SCIH 2 US

APPLICANTS

SC Intelligent Holding Ltd., Lappeenranta, FINLAND;

INVENTORS

Lauri Valjakka, Lappeenranta, FINLAND;
Jukka-Pekka Jussila, Lappeenranta, FINLAND;
Jari Tapio, Lappeenranta, FINLAND;

**** CONTINUING DATA ***************************

**** FOREIGN APPLICATIONS ***************************

FINLAND 20145013 01/08/2014

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **

01/16/2015

Foreign Priority claimed	35 USC 119(a-d) conditions met	Verified and Acknowledged	Met after Allowance	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
☑ Yes ☐ No	☑ Yes ☐ No	/YONAS A BAYOU/ Examiner's Signature	☐ yb Initials	FINLAND	8	9	4

ADDRESS

Seppo Laine Oy
Itamerenkatu 3 A
Helsinki, FI00180
FINLAND

TITLE

Method of and system for providing access to access restricted content to a user

FILING FEE RECEIVED		
1010	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

BIB (Rev. 05/07).

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	17	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 17:03
S1	1	14/591952	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:42
S2	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:43
S3	367	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:45
S4	10086	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in. (access$3 with restri$4).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:46
S5	1	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in. and (access$3 with restri$4).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:46
S6	1	"SC Intelligent Holding"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:49
S7	2563	(access$3 near3 (restricted adj (content file document information resource packet video game application app)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:55
S8	2255	(access$3 near3 (restricted adj (content file document information	US-PGPUB; USPAT;	OR	ON	2016/06/14 15:56

		resource packet video game application app))) and @ad<"20140108"	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S9	127	(access$3 near3 (restricted adj (content file document information resource packet video game application app))) and @ad<"20140108" and (G06F21/10).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:56
S10	5576	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:57
S11	1668	S10 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:58
S12	3	S10 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.) AND S9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:58
S13	113	(access$3 WITH (restricted adj (content file document information resource packet video game application app))).TI. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:59
S14	1	(access$3 WITH (restricted adj (content file document information resource packet video game application app))).TI. and @ad<"20140108" AND S11	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:59
S15	1	"digital rights management keys" with "access restricted content"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 10:54
S16	2	"digital rights management" with "access restricted content"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 10:56
S17	3	10/265437	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 11:11
S18	16	("5191573" | "5629980" | "5734823" | "5734891" | "5892900" | "5907288" |	US-PGPUB; USPAT;	OR	ON	2016/09/15 11:12

		"5940591" | "6134662" | "6185683" | "6212633" | "6253193" | "6327660" | "6891953" | "6970849").PN. OR ("7865964").URPN.	USOCR			
S19	161	"digital rights management keys"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S20	5672	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S21	1744	S20 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S22	0	"digital rights management keys" and S21	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S23	132	"digital rights management keys" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S24	6	"digital rights management keys" and @ad<"20140108" and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:09

EAST Search History (Interference)

< This search history is empty>

9/ 15/ 2016 5:06:47 PM
C:\ Users\ ybayou\ Documents\ EAST\ Workspaces\ 14591952.wsp

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14591952	VALJAKKA ET AL.
	Examiner	**Art Unit**
	YONAS BAYOU	2434

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	06/14/2016	09/15/2016							
	1	÷	N							
	2	÷	N							
	3	÷	N							
	4	÷	N							
	5	÷	N							
	6	÷	✓							
	7	÷	✓							
	8	÷	✓							
	9	÷	✓							

PTO/SB/30EFS (07-14)
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REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	14/591,952	Filing Date	2015-01-08	Docket Number (if applicable)	SCIH 2 US	Art Unit	2434
First Named Inventor	VALJAKKA, Lauri			Examiner Name	BAYOU, Yonas A		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, to any international application that does not comply with the requirements of 35 U.S.C. 371, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV.

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☒ Amendment/Reply
- ☒ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☒ Other Petition for Extension of Time Under 37 CFR 1.136(a), Substitute Specification, Substitute Specification Annotated

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____ (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

☐ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No _____

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

PTO/SB/30EFS (07-14)
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Signature of Registered U.S. Patent Practitioner			
Signature	/Matthew A. Swanson Reg. No. 73276/	Date (YYYY-MM-DD)	2017-02-21
Name	Matthew A. Swanson	Registration Number	73276

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

REMARKS/ARGUMENTS

Claims 6 – 15 are pending. Claims 1 – 5 have been canceled herein. Claims 6, 7, and 9 have been amended herein. Claims 10 – 15 have been added herein as supported at least by the specification on page 15, line 27 onwards and by figure 4. No new matter has been added.

Regarding Rejections under 35 U.S.C. § 112

Claims 6 – 8 are rejected under 35 U.S.C. § 112(b) as being indefinite to particularly point out and distinctly claim the subject matter which the inventor or joint inventor regards as the invention. More specifically, the Examiner states that: "*Claim element " ... configured to ... " is a limitation that invokes 35 U.S.C. 112(e) or 35 U.S.C. 112 (pre-AIA), sixth paragraph. However, the written description fails to clearly link or associate the disclosed structure, material, or acts to the claimed function such that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function.*

The Applicant respectfully disagrees with the Examiner's characterization of the claimed limitation, "configured to". Read as a whole, the limitation recites "a processor, memory and program instructions configured to cause an apparatus at least to: obtain content and key and derive information from the items obtained. Clearly the configured to language links the memory, program code and processor to the acts performed throughout the claim. Thus a review of other portions of the written description would not be necessary to understand the claimed limitations.

Further, the recited claim language would be well understood within the art. The modules recited could clearly include machine code or program code for performing such actions. Not to mention, the modules cited by the Examiner are not recited by the claims and therefore would not have a bearing on a person of ordinary skill's interpretation of the claim language as presently recited.

Finally, even if a person of ordinary skill in the art would find it necessary to consult the description to interpret the claim language, the structure recited within the specification on page 9 beginning on line 29 and continuing to page 10, line 3 should provide sufficient disclosure. The disclosure therein would clearly link the disclosed

structure to the claimed function in such a manner that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function.

Regarding Rejections under 35 U.S.C. § 101

Claims 6 – 9 are rejected under 35 U.S.C §101 as being ineligible subject matter. The Examiner states that the claimed invention is directed to an abstract idea in the field of An Idea Of Itself and that the claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception.

As per MPEP § 2106, step 2 of the subject matter eligibility analysis asks *"Does the claim wholly embrace a judicially recognized exception"*? The section goes on to state that *"claims directed to nothing more than abstract ideas [...] are not eligible for patent protection."* It would appear that within the analysis of the claims currently on record, the Examiner has not fully considered what the claims wholly embrace nor whether the claims are directed to nothing more than an abstract idea. Applicant thus traverses the rejection based on the fact that the claims are not directed to an abstract idea, and, even if the claims were so directed, the claims in fact include additional elements which amount to significantly more than the judicial exception.

Regarding claim 6

Independent claim 6, as amended herein, concerns an apparatus and program instructions which are used to obtain access restricted content from a database or server, obtain a DRM key from the database, derive information from the content using the key, and derive a second key from the content using that information. Clearly claim 6 as a whole does not wholly embrace an abstract idea as there are very real and non-abstract steps and limitations recited by the claim. To paraphrase the USPTO's Abstract Idea Examples, issued January 27, 2015 *"Such action does not describe an abstract concept, or a concept similar to those found by the courts to be abstract, such as a fundamental economic practice, a method of organizing human activity, an idea itself (standing alone), or a mathematical relationship."* (pg. 3)

The USPTO's July 2015 provides a chart on page 2 to '*provide further information on identifying abstract ideas*'. The chart states that "An Idea 'Of Itself'" is

"An idea standing alone such as an uninstantiated concept, plan or scheme, as well as a mental process (thinking) that "can be performed in the human mind, or by a human using a pen or paper". At present, it is unclear to the applicant how the recited language of claim 6, requiring that a device perform real and non-abstract steps could be construed as either an uninstantiated concept or a mental process.

Even if the claims were determined to be directed to an abstract idea, the additional claim elements recited by the claim would result to significantly more than the abstract idea itself. The Examiner has stated that "*Thus, taken alone, the additional elements do not amount to significantly more than the above-identified judicial exception (the abstract idea). Looking at the limitations as an ordered combination adds nothing that is not already present when looking at the elements taken individually. There is no indication that the combination of elements improves the functioning of a computer or improves any other technology. Their collective functions merely provide conventional computer implementation.*" (Office Action, pg. 6). Applicant respectfully disagrees.

As per the Memorandum provided in the May 2016 Subject Matter Eligibility Update ('the Update') "the rejection [under 35 U.S.C. § 101] should identify the additional elements in the claim and explain why the elements taken individually and in combination do not amount to a claim as a whole that is significantly more than" an abstract idea. The Examiner states that the processor is the only additional element recite by the claims. However, this characterization would wholly ignore the access restricted content and first and second digital rights management keys as recited by the claims.

Therefore, should the Examiner wish to maintain the present rejection, Applicant respectfully requests that the Examiner establish for the record how an apparatus or method which obtains access restricted content from a database or server, obtains a DRM key from the database, derives information from the content using the key, and derives a second key from the content using that information ***is directed toward "an uninstantiated concept or mental process"*** (i.e. an abstract idea) and, if so directed, how the added limitations do not constitute significantly more than an abstract idea.

Regarding claims 9 and 10

Claims 9 and 10 recite similar subject matter as claim 6 and should be patent eligible subject matter under 35 U.S.C. § 101, for the reasons cited above with respect to claim 6.

Regarding dependent claims

As outlined above, the independent claims are not directed to a judicial exception. Therefore the dependent claims are also not drawn to a judicial exception. Even if the claims were directed to an exception, the claims clearly recite additional elements amounting to significantly more. Thus, the claims are eligible subject matter under 35 U.S.C. § 101.

Regarding Rejections under 35 U.S.C. § 102

Claims 6-9 are rejected under 35 U.S.C. § 102 (a) (1) as being anticipated by Kondareddy et al., Pub. No.: US 2012/0308008 (hereinafter Kondareddy). Applicant traverses the rejection for at least the reason that Kondareddy fails to disclose each and every element of the claims.

Claim 6, as amended, recites an apparatus which is configured to "*obtain a first digital rights management key from the content database*". Kondareddy does not appear to disclose a content database. Indeed, it appears that Kondareddy does not mention any form of database. Claim 6 also recites the limitation of "*deriving a second digital rights management key from the access restricted content using information describing encryption properties of the access restricted content*". This limitation also appears to be absent from Kondareddy.

Therefore, as the above limitations do not appear to be disclosed in Kondareddy, Kondareddy does not disclose each and every element of claim 6 as amended. For at least that reason, claim 6 should be patentable over Kondareddy.

Regarding claim 9

Claim 9, as amended, recites an apparatus which is configured to "obtain a first digital rights management key from the content database". As stated previously, Kondareddy does not appear to disclose any form of database. Also Kondareddy does not seem to disclose the limitation of deriving a second DRM key from the encryption properties of the access restricted content.

Therefore, Kondareddy does not disclose each and every element of claim 9 as amended. For at least that reason, claim 9 should be patentable over Kondareddy.

Regarding dependent claims

Claims 7 and 8 are dependent on claim 6 and therefore are patentable over Kondareddy for at least the reasons outlined above with respect to claim 6.

Reconsideration and withdrawal of the present rejections is respectfully requested.

CONCLUSION

The Applicant believes that that present application is in condition for allowance. Notice of the same is earnestly solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Matthew A. Swanson, Reg. No. 73276 at (571) 281-4850, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Respectfully submitted,

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2017-02-20

AMENDMENTS TO THE SPECIFICATION

A substitute specification is submitted herewith. Also submitted herewith is an annotated substitute specification showing the changes to the specification relative to the specification as originally filed. ***No new matter has been added in this amendment.***

As outlined in the annotated substitute specification, the specification has been amended to correct a typographical error on page 9 and two typographical errors on page 16. On page 9, 'The processor 204' has been changed to 'The processor 24'. On page 16, line 1, 'illustrates' has been changed to 'illustrated' and on line 5 'phase 440' has been changed to 'phase 430'.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1 – 5. (Canceled)

6. (Currently Amended) An apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to:
   - obtain an access restricted content from at least one of a content database and a content providing server;
   - obtain a first digital rights management key from the content database;
   - derive~~, using the first digital rights management key, from the access restricted content~~ information describing encryption properties of the access restricted content from the access restricted content using the first digital rights management key, and
   - derive a second digital rights management key from the access restricted content~~,~~ using the information describing encryption properties of the access restricted content~~, from the access restricted content at least one of a content payload and a second digital rights management key~~.

7. (Currently Amended) An apparatus according to claim 6, wherein the second digital rights management key is at least in part operable to obtain ~~the~~ a content payload from the access restricted content.

8. (Original) An apparatus according to claim 6, wherein the apparatus is caused to obtain the first digital rights management key either by receiving it from a server or by generating it at least in part from at least one of environmental parameters and parameters of the access restricted content.

9. (Currently Amended) A method, comprising:
   - obtaining an access restricted content from at least one of a content database and a content providing server;
   - obtaining a first digital rights management key from a content database;
   - deriving, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content, and
   - deriving, using the information describing encryption properties of the access restricted content, from the access restricted content ~~at least one of a content payload and~~ a second digital rights management key.

10. (New) A system, comprising at least one client application, a content server application and a content database, the client, server and database comprising program instructions, the configured to cause the system at least to:
    - cause the client to search a digitally encrypted content,
    - cause the client derive a content identifier from the result of the content search,
    - cause the client to transmit a message comprising the content identifier to the content server,
    - cause the content server to transmit a query to the content database, the query comprising the content identifier and a client identifier,
    - cause the content database to transmit a reply to the content server, the reply comprising a validation result,
    - cause the content server to determine if the validation result allows the client application access to the content,
    - if the determination is positive, cause the content server to transmit a first DRM key to the client application.

11. (New) The apparatus of claim 10, wherein the system is caused to, after the transmission of the first DRM key, to at least:

- cause the client to access the digitally encrypted content by using the first DRM key,
- obtain at least one first fingerprint based on at least one of the first DRM key, the encryption properties of the digitally encrypted content, and the digitally encrypted content,
- transmit the at least one first fingerprint from the client to the content server, the first fingerprint being stored in the memory of the content server,
- cause the content server to query the content database for at least one second fingerprint,
- obtain a second fingerprint from the content database, the second fingerprint being stored in the memory of the content server,
- cause the content server to compare the first and second fingerprint and determine if the fingerprints match,
- in case of a match, cause the content server to provide the client with a positive validation result.

12. (New) The apparatus of claim 11, wherein the system is caused to, after the provision of the positive validation result, to at least:

- cause the client to access the content to retrieve a first DRM header,
- cause the client to use at least one of the first DRM header or a second DRM header to prepare at least one of second and third DRM keys,
- cause the client to retrieve the payload of the content.

13. (New) The apparatus of claim 11, wherein the system is caused to, after the retrieval of the first DRM header, to at least cause the client to use at least one of the first DRM header or a second DRM header to prepare second and third DRM keys.

14. (New) The apparatus of claim 11, wherein the system is caused to, after the retrieval of the first DRM header, to at least apply the first DRM key to the header to obtain a second DRM header.

15. (New) The apparatus of claim 11, wherein the system is caused to, after the retrieval of the payload of the content, to at least:
    - cause the client to inform the content server of the content retrieval,
    - cause the content server to inform the content database of the content retrieval,
    - cause the content database to inform the content server of a registration of the content,
    - cause the content server to inform the client of a registration of the content.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	: 14/591,952	Confirmation No. : 5164
First Named Inventor	: Lauri Valjakka	
Filed	: 01/08/2015	
TC/AU	: 2434	
Examiner	: Bayou, Yonas A	
Attorney Docket No.	: SCIH 2 US	

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO FINAL OFFICE ACTION AND REQUEST FOR CONTINUED EXAMINATION

INTRODUCTORY COMMENTS

In response to the Final Office Action dated September 20, 2016, a Request for Continued Examination under 37 CFR § 1.114 is herewith filed. Please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Amendments to the Specification are addressed on page 7 of this paper.

Remarks/Arguments begin on page 8 of this paper.

PTO/AIA/22 (03-13)
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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)

Docket Number (Optional): SCIH 2 US

Application Number: 14/591,952

Filed: 2015-01-08

For: A method of and system for providing access to access restricted content to a user

Art Unit: 2434

Examiner: BAYOU, Yonas A

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

		Fee	Small Entity Fee	Micro Entity Fee	
☐	One month (37 CFR 1.17(a)(1))	$200	$100	$50	$
☑	Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$ 300
☐	Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$
☐	Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
☐	Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

☑ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☐ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number _____.

☑ Payment made via EFS-Web.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant.

☑ attorney or agent of record. Registration number 73276.

☐ attorney or agent acting under 37 CFR 1.34. Registration number _____.

/Matthew A. Swanson Reg. No. 73276/ — Signature

2017-02-21 — Date

Matthew A. Swanson — Typed or printed name

571-281-4850 — Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☑ * Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
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3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

A METHOD OF AND SYSTEM FOR PROVIDING ACCESS TO ACCESS RESTRICTED CONTENT TO A USER

FIELD OF THE INVENTION

This invention relates generally to a method of using digital rights management keys to provide access to access restricted content. In particular, this invention relates to an apparatus, method and/or system for providing access to access restricted content to a user and a method thereof.

BACKGROUND TO THE INVENTION

Many publishers, copyright holders, and individuals wish to control the use of digital content and devices after sale. There are numerous ways of controlling and protecting such digital content, for example, using digital rights management methods. However, such digital rights management methods are in general not effective.

The aim of the present invention is thus to provide an alternative method of and a system for providing access to access restricted content to a user.

SUMMARY OF THE INVENTION

According to a first aspect of the invention, there is provided a system for providing access to access restricted content to a user, the system including a communication arrangement operable to receive a content request message, the content request message including a content identifier, a processor configured to cause a first determination to be performed to yield a positive or a negative result, a validation module configured to, in response to the first determination yielding a positive result, obtain a first digital rights management key, the processor being further configured to cause a second determination to be performed to yield a

positive or a negative result, and responsive to the first and second determinations yielding a positive result, the validation module is configured to cause access to the access restricted content to be provided to the user.

According to a second aspect of the present invention, there is provided a method, comprising receiving a content request message, the content request message including a content identifier of an access restricted content, causing a first determination to be performed to yield a positive or a negative result, obtaining, in response to the first determination yielding a positive result, a first digital rights management key, causing a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, causing access to the access restricted content to be provided to the user.

In a first set of embodiments of the invention in accordance with the second aspect, the method comprises causing transmission of the access restricted content to the user, wherein the access restricted content comprises in encrypted form at least one of a second and a third digital rights management key, wherein the at least one of the second and a third digital rights management key is obtainable from the access restricted content by using the first digital rights management key.

In a second set of embodiments of the invention in accordance with the second aspect, the second determination is based at least in part on a fingerprint of the access restricted content.

According to a first set of variants of the second set of embodiments in accordance with the second aspect, the method comprises performing the second determination by comparing a first fingerprint received in the apparatus from the user to a second fingerprint received in the apparatus from a content database.

According to a third aspect of the present invention, there is provided an apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to obtain an access restricted content from at least one of a content database and a content providing server, obtain a first digital rights management key, derive, using the first digital

rights management key, from the access restricted content information describing encryption properties of the access restricted content, and to derive, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key.

According to a fourth aspect of the present invention, there is provided a method, comprising obtaining an access restricted content from at least one of a content database and a content providing server, obtaining a first digital rights management key, deriving, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content, and deriving, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key.

According to a fifth aspect of the present invention, there is provided a non-transitory computer readable medium having stored thereon a set of computer readable instructions for a causing an apparatus to perform actions, the computer readable instructions comprising code for receiving a content request message, the content request message including a content identifier of an access restricted content, code for causing a first determination to be performed to yield a positive or a negative result, code for obtaining, in response to the first determination yielding a positive result, a first digital rights management key, code for causing a second determination to be performed to yield a positive or a negative result, and code for causing, responsive to the first and second determinations yielding a positive result, access to the access restricted content to be provided to the user.

According to a sixth aspect of the present invention, there is provided an apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to receive a content request message, the content request message including a content identifier of an access restricted content, cause a first determination to be performed to yield a positive or a negative result, obtain, in response to the first determination yielding a positive result, a first digital rights management key, cause a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, to cause access to the access restricted content to be provided to the user.

In some embodiments of the invention in accordance with the first, second, third, fourth, fifth and/or sixth aspects the first digital rights management key is unique to a specific session.

In response to a determination that the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers, the validation module may generate a first digital rights management key and a header associated with the content identifier.

The communication arrangement may be operable to receive a content usage request message, the content usage request message including the user identifier, the first digital rights management key and the content identifier.

In an embodiment, the interrogation module may further be operable to interrogate the content database in order to determine whether or not the first digital rights management key and content identifier matches with any combination of first digital rights management key and the content identifier stored in the content database; and if the answer is affirmative, the validation module may provide content access to access restricted content to the user.

The header may be associated with the particular content and the first digital rights management key are used to obtain access to the access restricted content.

The validation module may further analyze the header associated with the first digital rights management key and may prepare a second digital rights management key.

The system may include a decryption module operable to use the first digital rights management key and second and third digital rights management keys in order to decode the content, thereby allowing the user use of content.

The validation module may further analyze the second digital rights management key in order to prepare a third digital rights management key.

In this embodiment, the interrogation module may be operable to determine whether or not the second digital rights management key is used to prepare the third digital rights management key; and if the answer is affirmative, the decryption module may use the first digital rights management key and the third digital rights management key to decode the content, thereby allowing the user use of content.

If the answer is negative, the decryption module may use the first digital rights management key, the second digital management key and the third digital rights management key to decode the content, thereby allowing the user use of content.

The content may be compressed. In some embodiments, the content is media content.

In this embodiment, the system may include an extraction module being operable to extract the compressed content, thereby allowing the user use of the content.

In addition, the system may include a calculation module being operable to calculate a time period indicative of time in which the user uses the content. The validation module may stop the use of the content by the user, in response to a determination that the calculated time period is equal to a pre-defined time period.

In an alternative embodiment, the system may include a content registration module being operable to register the status content usage against the user identifier and the content identifier on the content database. The status content usage may include the calculated time period associated with the user identifier and the content identifier.

In at least some embodiments, the user identifier is an identifier associated with a communication device of the user such as a MSISDN number of the communication device.

The invention further extends to a non-transitory computer readable medium having stored thereon a set of computer readable instructions for a causing a processor to provide access to access restricted content to a user comprising the computer implemented steps of;

receiving a content request message, the content request message including a unique identifier associated with the user and a content identifier;

interrogating a content database of content identifiers, digital management keys and user identifiers in order to determine whether or not the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers;

in response to a determination that there is a match, retrieving a first digital rights management key and a header associated with the user identifier;

interrogating the content database in order to determine whether or not the content identifier and the first digital rights management key matches with any combination of content identifier and first digital rights management key stored in the content database and associated with the user identifier; and

if the answer is affirmative, providing the content to the user.

In response to a determination that the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers, the computer readable instructions may include the computer implemented step of generating a first digital rights management key and a header associated with the content identifier.

The computer readable instructions may include the computer implemented steps of;

receiving a content access request message, the content access request message including the user identifier, the first digital rights management key and the content identifier;

interrogating the content database in order to determine whether or not the first digital rights management key and content identifier matches with any combination of first digital rights management key and the content identifier stored in the content database; and

if the answer is affirmative, the providing content access to access restricted content to the user.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be described, by way of example only, with reference to the accompanying drawings in which:

Figure 1 shows an example of network topology including a system for providing access to access restricted content to a user;

Figure 2 shows the system of Figure 1 in more detail;

Figure 3 shows a flowchart representing an example method of providing access to access restricted content to a user, according to another aspect of the present invention;

Figure 4 shows an example flow graph of a first method in accordance with at least some embodiments of the invention;

Figure 5 shows an example flow graph of a second method in accordance with at least some embodiments of the invention;

Figure 6 shows an example flow graph of a third method in accordance with at least some embodiments of the invention;

Figure 7 illustrates different DRM levels;

Figure 8 illustrates DRM key handling options;

Figure 9 illustrates DRM layers, and

Figure 10 illustrates an example DRM process sequence.

DETAILED DESCRIPTION

The following description of the invention is provided as an enabling teaching of the invention. Those skilled in the relevant art will recognize that many changes can be made to the embodiment described, while still attaining the beneficial results of the present invention. It will also be apparent that some of the desired benefits of the present invention can be attained by selecting some of the features of the present invention without utilizing other features. Accordingly, those skilled in the art will recognize that many modifications and adaptations to the present invention are possible and can even be desirable in certain circumstances, and are a part of the present invention. Thus, the following description is provided as illustrative of the principles of the present invention and not a limitation thereof.

In Figure 1 of the drawings, reference numeral 10 refers generally to an example of network topology including a system for providing access to access restricted content to a user. Referring also to Figure 2, an example system for providing access to access restricted content to a user is indicated by reference numeral 20.

The topology 10 includes a communication device 12 belonging to or used by a user (not shown) who intends to obtain access to access restricted content. It will be appreciated that the communication device 12 is may comprise a personal computer located at the premises of the user, a smart phone or a Personal Digital Assistant (PDA), for example. However, the communication device 12 can be a mobile telephone of the user or any other device with suitable communication capability. Communication device 12 may comprise any suitable device with communication capability, examples including tablet devices, set-top boxes, video game consoles etc.

In simple terms, the user (not shown) attempts to obtain access to access restricted content through the use of the user's communication device 12. The access restricted content may be stored in a database which is indicated as media storage device with reference numeral 14. Prior to the user obtaining access to the access restricted content, the system 20 may be configured to ensure that the user or communication device 12 of the user has particular access, i.e., the communication device 12 is authorized to obtain access to such access restricted content.

The illustrated topology includes a content provider indicated as reference numeral 16. The content provider may be a publisher or a copyright holder, or any suitable person who owns rights to the content and wishes to restrict access to such content. In other cases, the content provider may be the copyright owner, while a content distributor can be another party which has been authorized to manage access to the content on behalf of the content provider 16. The restricted content is digital content in a form of digital media. The digital media can be of any suitable form, for example, text, audio, video, graphics, animations or images.

The system 20 (further described in Figure 2) is communicatively coupled to a communications network in the form of the Internet 18. Also communicatively coupled to the Internet is the communication device 12. The communication device 12 is thus connected to the system 18 via the Internet, for example. In use, the user may obtain access to the media content through Internet 18. The topology further illustrates a media storage device 14 which may form part of the system 20. Alternatively, the system 20 may be connected to the media storage device 14 via Internet 18 (as shown in Figure 1).

Referring now to Figure 2, the system 20, hereafter referred to as a content access authorization system 20, includes a content access authorization server 22 which, in turn, includes a processor 24 defining a plurality of modules 26, 28, 30 and 32 which correspond to functional tasks performed by the processor 24. The processor 24 includes an interrogation module 26, a validation module 28, a calculation module 30 and a decryption module 32. Modules 26, 28, 30 and 32 may be comprised of software modules configured to cause

processor 24 to perform corresponding functions, or the modules may comprise hardware and software elements. For example, a decryption module may comprise decryption software and hardware features of processor 24 designed to facilitate decryption of data in processor 24. Processor 24 may comprise an Intel Atom processor, for example. Server 22 may comprise memory, which is not illustrated, the memory being operable to store computer instructions processor 24 may execute to cause server 22 to perform various actions.

The content access authorization server 22 further includes a communication arrangement 34 operable to connect to the Internet 18. Communication arrangement 34 may comprise, for example, an Ethernet, fiber optic of wireless data interface. The authorization system 20 is operably connectable to a content database, that is, media storage device 14 for storing media content, content identifiers, digital management keys and/or user identifiers. The data storage device 14 can form part of the server 22 or be comprised as a standalone device external to server 22. In particular, there may be a plurality of media storage devices located within premises of various content providers and/or content distributors and communicatively coupled to the media storage device 14. The media storage device 14 stores therein a plurality of content identifiers and associated content, digital rights management keys and/or user identifiers. For example, each user may be able to have access to a particular content associated with a particular content identifier. Such user will be identified through the user identifier. In particular, the user identifier may comprise an identifier associated with the personal computer 12 of the user. In this case, the user may only be able to obtain access to the access restricted content, if the user attempts to access the access restricted content using the personal computer 12. In an embodiment where the communication device 12 is a mobile telephone, the identifier associated with the user may comprise an MSISDN number or session initiation protocol SIP identity associated with that particular mobile telephone.

Although described herein primarily with reference to an authorization server, communication device 12 may have similar structure, in particular communication device 12 may comprise a processor, memory and a communications arrangement which may each be similar to those described above.

Referring now also to Figure 3 which shows a high-level method for providing access to access restricted content to a user, in accordance with at least one embodiment of the

invention. The example method 40 is not necessarily dependent on the system 20 and/or the network topology 10, and vice versa.

In the illustrated embodiment, the communication arrangement 34 receives (at block 44) a content request message from the personal computer 12 of the user. The content request message includes a unique identifier associated with the user and a content identifier. Therefore, the user can user a user interface, e.g., a keyboard and input, e.g., serial number of the personal computer 12 and a predefined number of the content to which user wishes to obtain access. The communication arrangement can include a receiver module (not shown) operable to receive the content request message.

The interrogation module 26 interrogates (at block 44) the media storage device 14 whether or not the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers. This is so as to check whether the user, for example, the communication device 12 of the user is registered to be able to have access to the media content. The media storage device 14 may have been populated during a period when the user pre-registered to have access to the access restricted content. For example, when the user purchased the media content, the user could have been requested to pre-register then. The pre-registration process can take any conventional format. For example, pre-registration may comprise that certain subscriber classes in a cellular network are granted access to certain classes of content, wherein granting access to a class of content comprises granting access to each content item comprised in the class of content.

The validation module 28 retrieves (at block 46) a first digital rights management key (Key #1) and a header associated with the user identifier in response to a determination that the received content identifier and user identifier matches with at least one combination of the stored user identifiers and content identifiers. Key #1 is retrieved from the media storage device 14, alternatively, Key #1 can be retrieved from a server which is located at the premises of the content distributor and/or content provider. In other embodiments, the Key #1 can be located at a server located at the user's premises. The interrogation module (at block

48) further interrogates the media storage device 14 in order to determine whether or not the content identifier and the Key #1 matches with any combination of content identifier and f Key #1 stored in the media storage device 14 and associated with the user identifier. If the answer is affirmative, the validation module (at block 50) provides the access restricted media content to the user. Therefore, the Key #1 may be associated with the personal computer 12 of the user. In this instance, the Key #1 is used to provide the user access to access restricted media content. The Key #1 only provides access to the content i.e. the user is not able to use the content. Therefore, if the user attempts to obtain access to the access restricted content using a different personal computer, the user will not be able to obtain such access. This will prohibit users from providing the Key #1 to any other party in order for that party to access the access restricted content at another personal computer. The header is associated with the particular media content and the Key #1 and the header are used to obtain access to the access restricted content.

In an embodiment, in response to a determination that the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers, the validation module 28 may generate (not shown) a first digital rights management key and a header associated with the content identifier. The Key #1 can be generated from the environment and media content parameters. Generating a key from environment and media content parameters may comprise, for example, using parameters relating to communication device 12, a subscription of the user or aspects of the content in a key generation process. As a specific example, where communication device 12 comprises a cellular telephone, the key generation process may use as input information relating to a secret stored on a subscriber identity module, SIM, card. Therefore, each time when the user requires access to access restricted content, new Key #1 may be generated.

Once the user has access to the access restricted media content, the user may need to use the media content. In that instance, the communication arrangement 34 may receive (not shown) a content usage request message from the personal computer 12 of the user. In simple terms, the user uses the keyboard to indicate that he / she requires usage of the restricted media content. The content usage request message includes the user identifier, the Key #1 and the

content identifier. Therefore, the user will use the generated / retrieved Key #1 in order to be allowed to use the restricted media content. The user may wish to use the restricted media content by, for example, copying the media content, listening to the media content or editing (if allowed) the media content. The validation module 28 analyses the header associated with the Key #1 and prepares a second digital rights management key (Key #2). The preparation of the Key #2 may comprise, for example, performing a cryptographic operation on at least part of the access restricted content, wherein the cryptographic operation may employ Key #1. The cryptographic operation may comprise decrypting Key #2 by using Key #1. A decryption module (30) may be configured to use Key #1 and Key #2 to decode the media content, thereby allowing the user use of media content.

The validation module may further use Key #1 in order to prepare a third digital rights management key (Key #3). It will be appreciated that at least in some embodiments Key #2 and Key #3 cannot be prepared without Key #1. In these embodiments, the interrogation module 26 determines whether or not Key #1 is used to prepare the Key #2, and if the answer is affirmative, the decryption module 30 uses Key #1 and Key #2 to decode the media content, thereby allowing the user use of content. Alternatively, the decryption module may use Key #1, Key #2 and Key #3 to decode the media content, thereby allowing the user use of content. Key #3 may be obtained from the access restricted content using Key #1 in a similar was as described above in connection with obtaining Key #2.

In an example embodiment, the media content is compressed. In this embodiment, the system can include an extraction module (not shown). The extraction module is operable to extract the compressed media content, thereby allowing the user use of the content.

A calculation module 32 calculates (not shown) a time period indicative of time in which the user uses the content. The use of the media content may be available for a particular time period. For example, a user can be allowed to use the media for only one (1) hour. Therefore, the calculation module 32, as the user uses the media content, can calculate the user's usage period. When the calculated time period reaches a pre-defined usage time, e.g., one (1) hour, the validation module28 stops the use of the media content by the user.

In an alternative embodiment, the system 20 includes a content registration module (not shown). The content registration module registers the status content usage against the user identifier and the content identifier on the media storage device 14. The status content usage includes the calculated time period associated with the user identifier and the content identifier. Therefore, it is possible to detect the rate of usage of the media content for each user, that is, the number of times the media content was accessed. The status content usage will also be able to provide an indication of the last time the media content was accessed by the user.

At least one of the first, second and third digital rights management keys may be, depending on the embodiment, arranged to be session-specific in the sense that it is generated dynamically for use in a single session. This is advantageous since if a session-specific key is compromised, it cannot be used to gain access to content in a subsequent session.

In general there is provided an apparatus, comprising at least one processor and a memory comprising program instructions. The apparatus may comprise a server, for example. The processor, memory and program instructions configured to cause the apparatus at to receive a content request message, the content request message including a content identifier of an access restricted content. The content request message may further comprise an identifier associated with the user. The apparatus may be caused to cause a first determination to be performed to yield a positive or a negative result and to obtain, in response to the first determination yielding a positive result, a first digital rights management key. The first determination may comprise a query, such as a query transmitted to a content database, the query comprising the content identifier and the identifier associated with the user. Alternatively to a query, the first determination may comprise a determination as to whether the access restricted content can be found in accordance with the content request.

The apparatus may be caused to cause a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, to cause access to the access restricted content to be provided to the user. The second determination may be based at least in part on a fingerprint of the access restricted content. The second determination may comprise a comparison between a first fingerprint

received in the apparatus from the user to a second fingerprint received in the apparatus from a content database.

The second determination may comprise a check as to whether the user has rights to access the access restricted content.

In response to the first determination yielding a positive result, for example when a content database returns a positive result to a query, the apparatus is in at least some embodiments configured to obtain a header associated with the content identifier and wherein the header associated with the content identifier and the first digital rights management key are usable to at least in part obtain access to the access restricted content. The header may be obtained by the apparatus, for example, by receiving it from the content database.

In general there is provided a second apparatus comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to obtain an access restricted content from at least one of a content database and a content providing server. The second apparatus may be configured to obtain the access restricted content by receiving it over a cellular or Ethernet connection, for example. The second apparatus may be configured to store the access restricted content, at least in part, in a memory comprised in the second apparatus.

The second apparatus may be configured to obtain a first digital rights management key, to derive, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content and derive, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key. Where the second apparatus is caused to derive a second digital rights management key, it may be further configured to use the first and second digital rights management keys to obtain access to the content payload. The content payload may comprise, for example, a media file such as an audio or video recording.

Figure 4 shows an example flow graph of a first method in accordance with at least some embodiments of the invention. On the vertical axes are, from left or right, a content database,

a content server, a client and content. The illustrated method begins in phase 410 and proceeds to phase 420, where the client performs a content location, for example by searching with at least one keyword. As a response, in phase 430 the client receives a content identifier. In phase 440, the client transmits a message to the content server, the message comprising the content identifier received in phase 430 and an identifier of the client. The message of phase 440 may comprise a content request message. Responsive to receiving the message of phase 440, the content server may transmit, in phase 450, a query to the content database, the query comprising the content identifier and client identifier.

Responsive to the query, the content database may reply, in phase 460, to the content server with a message comprising a validation result wherein the validation result may comprise a first DRM key. The content server determines whether the validation was successful in phase 470. In case the validation was unsuccessful, for example, where the client does not have access to the content, processing advances from phase 470 to phase 480 and ends. On the other hand where the validation was successful and the message of phase 460 comprises a first DRM key, processing advances from phase 470 to phase 490 where the content server transmits the first DRM key to the client.

Responsive to receipt of the first DRM key in phase 490, the client may access the content using at least in part the first DRM key. This is illustrated as phase 4100. The client may obtain, in phase 4120, a fingerprint of the content wherein the obtaining may be based at least in part on the first DRM key. In phase 4130, the client may transmit the fingerprint to the content server, optionally with the content identifier and in phase 4140, the content server may query the content database for the content fingerprint. The query may comprise the content identifier. In phase 4150, the content database may responsively provide the fingerprint to the content server. In phase 4160, the server may compare the fingerprints received in phases 4150 and 4130. In case of mismatch, the processing advances to phase 4170 and ends. In case the fingerprints match, processing advances to phase 4180 where the client is provided with a positive validation result.

Responsive to the positive validation result of phase 4180, the client in phase 4190 proceeds to access the content to retrieve a DRM header, and optionally also to apply the first DRM key to the header, responsive to which the client gains access, phase 4200, to an open DRM

header of the content. Using the header the client may be enabled to prepare second and third DRM keys, and, optionally, to apply at least one of the second and third DRM keys to retrieve payload of the content. This retrieval is illustrated as phases 4210 and 4220.

After using the payload of the content, the client may inform the content server of this, phase 4230, and the server may inform the content database of this, in phase 4240. In phase 4250, the content database may inform the content server of a registration of the content, the message of phase 4250 optionally comprising a result code. The content server may notify the client of this, phase 4260 and the client may modify the content accordingly, phase 4270.

When the first method is used, at least one of the following may apply:

1) the client has an on-line connection with the server, and 2) the client has acquired the content before the validation starts.

Figure 5 shows an example flow graph of a second method in accordance with at least some embodiments of the invention. The vertical axes are identical to those in Figure 4. The process of Figure 5 begins in phase 510 and proceeds to phase 520, where the client requests content from the server. The message of phase 520 may comprise a content identifier and client identifier. The server may, phase 530, query the content database with the content identifier and client identifier. The content database replies in phase 540 whether the client should be granted access to the content.

In phase 550 the server determines whether the validation was successful, in other words whether the client is to be granted access to the content. In case no, processing advances to phase 560 and the process ends. In case the answer is yes, the server generates a DRM header, for example a dynamic DRM header, and a first DRM key. In phase 570 the server encrypts the content and streams it to the client, as well as calculates a content fingerprint.

In phase 580 the client saves the received content, optionally in a temporary location and in phase 590 the client obtains from the content a content fingerprint, which is sent along with the content identifier to the server in phase 5100.

In phase 5110 the server queries the content database for a content fingerprint of the content, the query comprising the content identifier and the client identifier. The server receives the fingerprint from the database in phase 5120. In phase 5130 the server determines whether the fingerprints received in phases 5120 and 5100 are the same. In case they are not, the server informs the client of this in phase 5140, and responsively the client removes the content it stored in phase 580. In case the fingerprints match, phase 5150, the client is informed of this. In embodiments where the content was stored in a temporary location in phase 580, the client in phase 5160 moves the content to a final location. In embodiments where the content was stored in a non-temporary location in phase 580, the client may validate the content in phase 5160.

When the second method is used, at least one of the following may apply:

1) the client has an on-line connection to the server for receiving the streamed content, and 2) the client has been registered to the server before the streaming is started.

Figure 6 shows an example flow graph of a third method in accordance with at least some embodiments of the invention. On the vertical axes are illustrated, from left to right, a content accessor, who may be a client, a local provider and the content being accessed. The process begins in phase 610 and proceeds to phase 620, where the content accessor requests content from a local provider with a content identifier comprised in the request message. In phase 630, the local provider locates the content using the content identifier. In case the content is determined to not exist, processing advances to phase 640 and 650, where the local provider informs the accessor of this and the process ends. On the other hand if the content is determined to exist, processing advances to phase 660. The local provider generates a first DRM key and obtains a DRM header. The DRM is verified, and in case the verification fails processing advances to phase 670 where the content accessor is informed of this and processing ends. On the other hand if DRM verification succeeds, processing advances to phase 680 and the content accessor is granted access to the content, which may comprise, for example, an audio, video, or audiovisual presentation.

When the third method is used, at least one of the following may apply:

1) the content has been delivered to the content accessor from the server or from an external supplier. 2) the client is able to use the content without leaving it in an unprotected state. 3) the content is provided in a format that cannot be stored for later access, and 4) the content DRM is accessed only when the content needs to be shown or played.

Figure 7 illustrates different DRM levels. DRM levels may in this example be numbered from zero to five, with each level providing for different encryption and key management functionalities. Which level is used for a specific content item, may be determined from a DRM header of the content, for example. The keys described in the Figure may comprise DRM keys, for example.

Figure 8 illustrates DRM key handling options.

Figure 9 illustrates DRM layers in an example embodiment of the invention. The illustrated layers may be applied in sequence to the media layer, which may comprise a payload of the content item. To obtain access to the payload, a user may need to apply decryption operations in reverse order to the order in which encryption operations were performed. In different embodiments, at least one of the encryption layers illustrated in Figure 9 may be omitted.

Figure 10 illustrates an example DRM process sequence in an example embodiment of the invention. In the illustrated example, a set of DRM encryption layers such as the one illustrated in Figure 9 is opened in phases to ultimately allow access to the media, that is the content payload.

It should be noted that in the above, a "server" may take different forms depending on the embodiment. In particular, alternatively to a fixed computer residing in a network, in some embodiments a server may comprise a peer device to the client device, such as for example where the client device is a tablet or smartphone device, the server may also be a tablet or smartphone device.

ABSTRACT

According to an example embodiment of the invention, there is provided a system for providing access to access restricted content to a user, the system including a communication arrangement operable to receive a content request message, the content request message including a content identifier, a processor configured to cause a first determination to be performed to yield a positive or a negative result, a validation module configured to, in response to the first determination yielding a positive result, obtain a first digital rights management key, the processor being further configured to cause a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, the validation module is configured to cause access to the access restricted content to be provided to the user.

A METHOD OF AND SYSTEM FOR PROVIDING ACCESS TO ACCESS RESTRICTED CONTENT TO A USER

FIELD OF THE INVENTION

This invention relates generally to a method of using digital rights management keys to provide access to access restricted content. In particular, this invention relates to an apparatus, method and/or system for providing access to access restricted content to a user and a method thereof.

BACKGROUND TO THE INVENTION

Many publishers, copyright holders, and individuals wish to control the use of digital content and devices after sale. There are numerous ways of controlling and protecting such digital content, for example, using digital rights management methods. However, such digital rights management methods are in general not effective.

The aim of the present invention is thus to provide an alternative method of and a system for providing access to access restricted content to a user.

SUMMARY OF THE INVENTION

According to a first aspect of the invention, there is provided a system for providing access to access restricted content to a user, the system including a communication arrangement operable to receive a content request message, the content request message including a content identifier, a processor configured to cause a first determination to be performed to yield a positive or a negative result, a validation module configured to, in response to the first determination yielding a positive result, obtain a first digital rights management key, the processor being further configured to cause a second determination to be performed to yield a

positive or a negative result, and responsive to the first and second determinations yielding a positive result, the validation module is configured to cause access to the access restricted content to be provided to the user.

According to a second aspect of the present invention, there is provided a method, comprising receiving a content request message, the content request message including a content identifier of an access restricted content, causing a first determination to be performed to yield a positive or a negative result, obtaining, in response to the first determination yielding a positive result, a first digital rights management key, causing a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, causing access to the access restricted content to be provided to the user.

In a first set of embodiments of the invention in accordance with the second aspect, the method comprises causing transmission of the access restricted content to the user, wherein the access restricted content comprises in encrypted form at least one of a second and a third digital rights management key, wherein the at least one of the second and a third digital rights management key is obtainable from the access restricted content by using the first digital rights management key.

In a second set of embodiments of the invention in accordance with the second aspect, the second determination is based at least in part on a fingerprint of the access restricted content.

According to a first set of variants of the second set of embodiments in accordance with the second aspect, the method comprises performing the second determination by comparing a first fingerprint received in the apparatus from the user to a second fingerprint received in the apparatus from a content database.

According to a third aspect of the present invention, there is provided an apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to obtain an access restricted content from at least one of a content database and a content providing server, obtain a first digital rights management key, derive, using the first digital

rights management key, from the access restricted content information describing encryption properties of the access restricted content, and to derive, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key.

According to a fourth aspect of the present invention, there is provided a method, comprising obtaining an access restricted content from at least one of a content database and a content providing server, obtaining a first digital rights management key, deriving, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content, and deriving, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key.

According to a fifth aspect of the present invention, there is provided a non-transitory computer readable medium having stored thereon a set of computer readable instructions for a causing an apparatus to perform actions, the computer readable instructions comprising code for receiving a content request message, the content request message including a content identifier of an access restricted content, code for causing a first determination to be performed to yield a positive or a negative result, code for obtaining, in response to the first determination yielding a positive result, a first digital rights management key, code for causing a second determination to be performed to yield a positive or a negative result, and code for causing, responsive to the first and second determinations yielding a positive result, access to the access restricted content to be provided to the user.

According to a sixth aspect of the present invention, there is provided an apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to receive a content request message, the content request message including a content identifier of an access restricted content, cause a first determination to be performed to yield a positive or a negative result, obtain, in response to the first determination yielding a positive result, a first digital rights management key, cause a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, to cause access to the access restricted content to be provided to the user.

In some embodiments of the invention in accordance with the first, second, third, fourth, fifth and/or sixth aspects the first digital rights management key is unique to a specific session.

In response to a determination that the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers, the validation module may generate a first digital rights management key and a header associated with the content identifier.

The communication arrangement may be operable to receive a content usage request message, the content usage request message including the user identifier, the first digital rights management key and the content identifier.

In an embodiment, the interrogation module may further be operable to interrogate the content database in order to determine whether or not the first digital rights management key and content identifier matches with any combination of first digital rights management key and the content identifier stored in the content database; and if the answer is affirmative, the validation module may provide content access to access restricted content to the user.

The header may be associated with the particular content and the first digital rights management key are used to obtain access to the access restricted content.

The validation module may further analyze the header associated with the first digital rights management key and may prepare a second digital rights management key.

The system may include a decryption module operable to use the first digital rights management key and second and third digital rights management keys in order to decode the content, thereby allowing the user use of content.

The validation module may further analyze the second digital rights management key in order to prepare a third digital rights management key.

In this embodiment, the interrogation module may be operable to determine whether or not the second digital rights management key is used to prepare the third digital rights management key; and if the answer is affirmative, the decryption module may use the first digital rights management key and the third digital rights management key to decode the content, thereby allowing the user use of content.

If the answer is negative, the decryption module may use the first digital rights management key, the second digital management key and the third digital rights management key to decode the content, thereby allowing the user use of content.

The content may be compressed. In some embodiments, the content is media content.

In this embodiment, the system may include an extraction module being operable to extract the compressed content, thereby allowing the user use of the content.

In addition, the system may include a calculation module being operable to calculate a time period indicative of time in which the user uses the content. The validation module may stop the use of the content by the user, in response to a determination that the calculated time period is equal to a pre-defined time period.

In an alternative embodiment, the system may include a content registration module being operable to register the status content usage against the user identifier and the content identifier on the content database. The status content usage may include the calculated time period associated with the user identifier and the content identifier.

In at least some embodiments, the user identifier is an identifier associated with a communication device of the user such as a MSISDN number of the communication device.

The invention further extends to a non-transitory computer readable medium having stored thereon a set of computer readable instructions for a causing a processor to provide access to access restricted content to a user comprising the computer implemented steps of;

receiving a content request message, the content request message including a unique identifier associated with the user and a content identifier;

interrogating a content database of content identifiers, digital management keys and user identifiers in order to determine whether or not the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers;

in response to a determination that there is a match, retrieving a first digital rights management key and a header associated with the user identifier;

interrogating the content database in order to determine whether or not the content identifier and the first digital rights management key matches with any combination of content identifier and first digital rights management key stored in the content database and associated with the user identifier; and

if the answer is affirmative, providing the content to the user.

In response to a determination that the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers, the computer readable instructions may include the computer implemented step of generating a first digital rights management key and a header associated with the content identifier.

The computer readable instructions may include the computer implemented steps of;

receiving a content access request message, the content access request message including the user identifier, the first digital rights management key and the content identifier;

interrogating the content database in order to determine whether or not the first digital rights management key and content identifier matches with any combination of first digital rights management key and the content identifier stored in the content database; and

if the answer is affirmative, the providing content access to access restricted content to the user.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be described, by way of example only, with reference to the accompanying drawings in which:

Figure 1 shows an example of network topology including a system for providing access to access restricted content to a user;

Figure 2 shows the system of Figure 1 in more detail;

Figure 3 shows a flowchart representing an example method of providing access to access restricted content to a user, according to another aspect of the present invention;

Figure 4 shows an example flow graph of a first method in accordance with at least some embodiments of the invention;

Figure 5 shows an example flow graph of a second method in accordance with at least some embodiments of the invention;

Figure 6 shows an example flow graph of a third method in accordance with at least some embodiments of the invention;

Figure 7 illustrates different DRM levels;

Figure 8 illustrates DRM key handling options;

Figure 9 illustrates DRM layers, and

Figure 10 illustrates an example DRM process sequence.

DETAILED DESCRIPTION

The following description of the invention is provided as an enabling teaching of the invention. Those skilled in the relevant art will recognize that many changes can be made to the embodiment described, while still attaining the beneficial results of the present invention. It will also be apparent that some of the desired benefits of the present invention can be attained by selecting some of the features of the present invention without utilizing other features. Accordingly, those skilled in the art will recognize that many modifications and adaptations to the present invention are possible and can even be desirable in certain circumstances, and are a part of the present invention. Thus, the following description is provided as illustrative of the principles of the present invention and not a limitation thereof.

In Figure 1 of the drawings, reference numeral 10 refers generally to an example of network topology including a system for providing access to access restricted content to a user. Referring also to Figure 2, an example system for providing access to access restricted content to a user is indicated by reference numeral 20.

The topology 10 includes a communication device 12 belonging to or used by a user (not shown) who intends to obtain access to access restricted content. It will be appreciated that the communication device 12 is may comprise a personal computer located at the premises of the user, a smart phone or a Personal Digital Assistant (PDA), for example. However, the communication device 12 can be a mobile telephone of the user or any other device with suitable communication capability. Communication device 12 may comprise any suitable device with communication capability, examples including tablet devices, set-top boxes, video game consoles etc.

In simple terms, the user (not shown) attempts to obtain access to access restricted content through the use of the user's communication device 12. The access restricted content may be stored in a database which is indicated as media storage device with reference numeral 14. Prior to the user obtaining access to the access restricted content, the system 20 may be configured to ensure that the user or communication device 12 of the user has particular access, i.e., the communication device 12 is authorized to obtain access to such access restricted content.

The illustrated topology includes a content provider indicated as reference numeral 16. The content provider may be a publisher or a copyright holder, or any suitable person who owns rights to the content and wishes to restrict access to such content. In other cases, the content provider may be the copyright owner, while a content distributor can be another party which has been authorized to manage access to the content on behalf of the content provider 16. The restricted content is digital content in a form of digital media. The digital media can be of any suitable form, for example, text, audio, video, graphics, animations or images.

The system 20 (further described in Figure 2) is communicatively coupled to a communications network in the form of the Internet 18. Also communicatively coupled to the Internet is the communication device 12. The communication device 12 is thus connected to the system 18 via the Internet, for example. In use, the user may obtain access to the media content through Internet 18. The topology further illustrates a media storage device 14 which may form part of the system 20. Alternatively, the system 20 may be connected to the media storage device 14 via Internet 18 (as shown in Figure 1).

Referring now to Figure 2, the system 20, hereafter referred to as a content access authorization system 20, includes a content access authorization server 22 which, in turn, includes a processor 24 defining a plurality of modules 26, 28, 30 and 32 which correspond to functional tasks performed by the processor 24. The processor 204 includes an interrogation module 26, a validation module 28, a calculation module 30 and a decryption module 32. Modules 26, 28, 30 and 32 may be comprised of software modules configured to cause

processor 24 to perform corresponding functions, or the modules may comprise hardware and software elements. For example, a decryption module may comprise decryption software and hardware features of processor 24 designed to facilitate decryption of data in processor 24. Processor 24 may comprise an Intel Atom processor, for example. Server 22 may comprise memory, which is not illustrated, the memory being operable to store computer instructions processor 24 may execute to cause server 22 to perform various actions.

The content access authorization server 22 further includes a communication arrangement 34 operable to connect to the Internet 18. Communication arrangement 34 may comprise, for example, an Ethernet, fiber optic of wireless data interface. The authorization system 20 is operably connectable to a content database, that is, media storage device 14 for storing media content, content identifiers, digital management keys and/or user identifiers. The data storage device 14 can form part of the server 22 or be comprised as a standalone device external to server 22. In particular, there may be a plurality of media storage devices located within premises of various content providers and/or content distributors and communicatively coupled to the media storage device 14. The media storage device 14 stores therein a plurality of content identifiers and associated content, digital rights management keys and/or user identifiers. For example, each user may be able to have access to a particular content associated with a particular content identifier. Such user will be identified through the user identifier. In particular, the user identifier may comprise an identifier associated with the personal computer 12 of the user. In this case, the user may only be able to obtain access to the access restricted content, if the user attempts to access the access restricted content using the personal computer 12. In an embodiment where the communication device 12 is a mobile telephone, the identifier associated with the user may comprise an MSISDN number or session initiation protocol SIP identity associated with that particular mobile telephone.

Although described herein primarily with reference to an authorization server, communication device 12 may have similar structure, in particular communication device 12 may comprise a processor, memory and a communications arrangement which may each be similar to those described above.

Referring now also to Figure 3 which shows a high-level method for providing access to access restricted content to a user, in accordance with at least one embodiment of the

invention. The example method 40 is not necessarily dependent on the system 20 and/or the network topology 10, and vice versa.

In the illustrated embodiment, the communication arrangement 34 receives (at block 44) a content request message from the personal computer 12 of the user. The content request message includes a unique identifier associated with the user and a content identifier. Therefore, the user can user a user interface, e.g., a keyboard and input, e.g., serial number of the personal computer 12 and a predefined number of the content to which user wishes to obtain access. The communication arrangement can include a receiver module (not shown) operable to receive the content request message.

The interrogation module 26 interrogates (at block 44) the media storage device 14 whether or not the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers. This is so as to check whether the user, for example, the communication device 12 of the user is registered to be able to have access to the media content. The media storage device 14 may have been populated during a period when the user pre-registered to have access to the access restricted content. For example, when the user purchased the media content, the user could have been requested to pre-register then. The pre-registration process can take any conventional format. For example, pre-registration may comprise that certain subscriber classes in a cellular network are granted access to certain classes of content, wherein granting access to a class of content comprises granting access to each content item comprised in the class of content.

The validation module 28 retrieves (at block 46) a first digital rights management key (Key #1) and a header associated with the user identifier in response to a determination that the received content identifier and user identifier matches with at least one combination of the stored user identifiers and content identifiers. Key #1 is retrieved from the media storage device 14, alternatively, Key #1 can be retrieved from a server which is located at the premises of the content distributor and/or content provider. In other embodiments, the Key #1 can be located at a server located at the user's premises. The interrogation module (at block

48) further interrogates the media storage device 14 in order to determine whether or not the content identifier and the Key #1 matches with any combination of content identifier and f Key #1 stored in the media storage device 14 and associated with the user identifier. If the answer is affirmative, the validation module (at block 50) provides the access restricted media content to the user. Therefore, the Key #1 may be associated with the personal computer 12 of the user. In this instance, the Key #1 is used to provide the user access to access restricted media content. The Key #1 only provides access to the content i.e. the user is not able to use the content. Therefore, if the user attempts to obtain access to the access restricted content using a different personal computer, the user will not be able to obtain such access. This will prohibit users from providing the Key #1 to any other party in order for that party to access the access restricted content at another personal computer. The header is associated with the particular media content and the Key #1 and the header are used to obtain access to the access restricted content.

In an embodiment, in response to a determination that the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers, the validation module 28 may generate (not shown) a first digital rights management key and a header associated with the content identifier. The Key #1 can be generated from the environment and media content parameters. Generating a key from environment and media content parameters may comprise, for example, using parameters relating to communication device 12, a subscription of the user or aspects of the content in a key generation process. As a specific example, where communication device 12 comprises a cellular telephone, the key generation process may use as input information relating to a secret stored on a subscriber identity module, SIM, card. Therefore, each time when the user requires access to access restricted content, new Key #1 may be generated.

Once the user has access to the access restricted media content, the user may need to use the media content. In that instance, the communication arrangement 34 may receive (not shown) a content usage request message from the personal computer 12 of the user. In simple terms, the user uses the keyboard to indicate that he / she requires usage of the restricted media content. The content usage request message includes the user identifier, the Key #1 and the

content identifier. Therefore, the user will use the generated / retrieved Key #1 in order to be allowed to use the restricted media content. The user may wish to use the restricted media content by, for example, copying the media content, listening to the media content or editing (if allowed) the media content. The validation module 28 analyses the header associated with the Key #1 and prepares a second digital rights management key (Key #2). The preparation of the Key #2 may comprise, for example, performing a cryptographic operation on at least part of the access restricted content, wherein the cryptographic operation may employ Key #1. The cryptographic operation may comprise decrypting Key #2 by using Key #1. A decryption module (30) may be configured to use Key #1 and Key #2 to decode the media content, thereby allowing the user use of media content.

The validation module may further use Key #1 in order to prepare a third digital rights management key (Key #3). It will be appreciated that at least in some embodiments Key #2 and Key #3 cannot be prepared without Key #1. In these embodiments, the interrogation module 26 determines whether or not Key #1 is used to prepare the Key #2, and if the answer is affirmative, the decryption module 30 uses Key #1 and Key #2 to decode the media content, thereby allowing the user use of content. Alternatively, the decryption module may use Key #1, Key #2 and Key #3 to decode the media content, thereby allowing the user use of content. Key #3 may be obtained from the access restricted content using Key #1 in a similar was as described above in connection with obtaining Key #2.

In an example embodiment, the media content is compressed. In this embodiment, the system can include an extraction module (not shown). The extraction module is operable to extract the compressed media content, thereby allowing the user use of the content.

A calculation module 32 calculates (not shown) a time period indicative of time in which the user uses the content. The use of the media content may be available for a particular time period. For example, a user can be allowed to use the media for only one (1) hour. Therefore, the calculation module 32, as the user uses the media content, can calculate the user's usage period. When the calculated time period reaches a pre-defined usage time, e.g., one (1) hour, the validation module28 stops the use of the media content by the user.

In an alternative embodiment, the system 20 includes a content registration module (not shown). The content registration module registers the status content usage against the user identifier and the content identifier on the media storage device 14. The status content usage includes the calculated time period associated with the user identifier and the content identifier. Therefore, it is possible to detect the rate of usage of the media content for each user, that is, the number of times the media content was accessed. The status content usage will also be able to provide an indication of the last time the media content was accessed by the user.

At least one of the first, second and third digital rights management keys may be, depending on the embodiment, arranged to be session-specific in the sense that it is generated dynamically for use in a single session. This is advantageous since if a session-specific key is compromised, it cannot be used to gain access to content in a subsequent session.

In general there is provided an apparatus, comprising at least one processor and a memory comprising program instructions. The apparatus may comprise a server, for example. The processor, memory and program instructions configured to cause the apparatus at to receive a content request message, the content request message including a content identifier of an access restricted content. The content request message may further comprise an identifier associated with the user. The apparatus may be caused to cause a first determination to be performed to yield a positive or a negative result and to obtain, in response to the first determination yielding a positive result, a first digital rights management key. The first determination may comprise a query, such as a query transmitted to a content database, the query comprising the content identifier and the identifier associated with the user. Alternatively to a query, the first determination may comprise a determination as to whether the access restricted content can be found in accordance with the content request.

The apparatus may be caused to cause a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, to cause access to the access restricted content to be provided to the user. The second determination may be based at least in part on a fingerprint of the access restricted content. The second determination may comprise a comparison between a first fingerprint

received in the apparatus from the user to a second fingerprint received in the apparatus from a content database.

The second determination may comprise a check as to whether the user has rights to access the access restricted content.

In response to the first determination yielding a positive result, for example when a content database returns a positive result to a query, the apparatus is in at least some embodiments configured to obtain a header associated with the content identifier and wherein the header associated with the content identifier and the first digital rights management key are usable to at least in part obtain access to the access restricted content. The header may be obtained by the apparatus, for example, by receiving it from the content database.

In general there is provided a second apparatus comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to obtain an access restricted content from at least one of a content database and a content providing server. The second apparatus may be configured to obtain the access restricted content by receiving it over a cellular or Ethernet connection, for example. The second apparatus may be configured to store the access restricted content, at least in part, in a memory comprised in the second apparatus.

The second apparatus may be configured to obtain a first digital rights management key, to derive, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content and derive, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key. Where the second apparatus is caused to derive a second digital rights management key, it may be further configured to use the first and second digital rights management keys to obtain access to the content payload. The content payload may comprise, for example, a media file such as an audio or video recording.

Figure 4 shows an example flow graph of a first method in accordance with at least some embodiments of the invention. On the vertical axes are, from left or right, a content database,

a content server, a client and content. The illustrated method begins in phase 410 and proceeds to phase 420, where the client performs a content location, for example by searching with at least one keyword. As a response, in phase 430 the client receives a content identifier. In phase 440, the client transmits a message to the content server, the message comprising the content identifier received in phase 440430 and an identifier of the client. The message of phase 440 may comprise a content request message. Responsive to receiving the message of phase 440, the content server may transmit, in phase 450, a query to the content database, the query comprising the content identifier and client identifier.

Responsive to the query, the content database may reply, in phase 460, to the content server with a message comprising a validation result wherein the validation result may comprise a first DRM key. The content server determines whether the validation was successful in phase 470. In case the validation was unsuccessful, for example, where the client does not have access to the content, processing advances from phase 470 to phase 480 and ends. On the other hand where the validation was successful and the message of phase 460 comprises a first DRM key, processing advances from phase 470 to phase 490 where the content server transmits the first DRM key to the client.

Responsive to receipt of the first DRM key in phase 490, the client may access the content using at least in part the first DRM key. This is illustrated as phase 4100. The client may obtain, in phase 4120, a fingerprint of the content wherein the obtaining may be based at least in part on the first DRM key. In phase 4130, the client may transmit the fingerprint to the content server, optionally with the content identifier and in phase 4140, the content server may query the content database for the content fingerprint. The query may comprise the content identifier. In phase 4150, the content database may responsively provide the fingerprint to the content server. In phase 4160, the server may compare the fingerprints received in phases 4150 and 4130. In case of mismatch, the processing advances to phase 4170 and ends. In case the fingerprints match, processing advances to phase 4180 where the client is provided with a positive validation result.

Responsive to the positive validation result of phase 4180, the client in phase 4190 proceeds to access the content to retrieve a DRM header, and optionally also to apply the first DRM key to the header, responsive to which the client gains access, phase 4200, to an open DRM

header of the content. Using the header the client may be enabled to prepare second and third DRM keys, and, optionally, to apply at least one of the second and third DRM keys to retrieve payload of the content. This retrieval is illustrated as phases 4210 and 4220.

After using the payload of the content, the client may inform the content server of this, phase 4230, and the server may inform the content database of this, in phase 4240. In phase 4250, the content database may inform the content server of a registration of the content, the message of phase 4250 optionally comprising a result code. The content server may notify the client of this, phase 4260 and the client may modify the content accordingly, phase 4270.

When the first method is used, at least one of the following may apply:

1) the client has an on-line connection with the server, and 2) the client has acquired the content before the validation starts.

Figure 5 shows an example flow graph of a second method in accordance with at least some embodiments of the invention. The vertical axes are identical to those in Figure 4. The process of Figure 5 begins in phase 510 and proceeds to phase 520, where the client requests content from the server. The message of phase 520 may comprise a content identifier and client identifier. The server may, phase 530, query the content database with the content identifier and client identifier. The content database replies in phase 540 whether the client should be granted access to the content.

In phase 550 the server determines whether the validation was successful, in other words whether the client is to be granted access to the content. In case no, processing advances to phase 560 and the process ends. In case the answer is yes, the server generates a DRM header, for example a dynamic DRM header, and a first DRM key. In phase 570 the server encrypts the content and streams it to the client, as well as calculates a content fingerprint.

In phase 580 the client saves the received content, optionally in a temporary location and in phase 590 the client obtains from the content a content fingerprint, which is sent along with the content identifier to the server in phase 5100.

In phase 5110 the server queries the content database for a content fingerprint of the content, the query comprising the content identifier and the client identifier. The server receives the fingerprint from the database in phase 5120. In phase 5130 the server determines whether the fingerprints received in phases 5120 and 5100 are the same. In case they are not, the server informs the client of this in phase 5140, and responsively the client removes the content it stored in phase 580. In case the fingerprints match, phase 5150, the client is informed of this. In embodiments where the content was stored in a temporary location in phase 580, the client in phase 5160 moves the content to a final location. In embodiments where the content was stored in a non-temporary location in phase 580, the client may validate the content in phase 5160.

When the second method is used, at least one of the following may apply:

1) the client has an on-line connection to the server for receiving the streamed content, and 2) the client has been registered to the server before the streaming is started.

Figure 6 shows an example flow graph of a third method in accordance with at least some embodiments of the invention. On the vertical axes are illustrated, from left to right, a content accessor, who may be a client, a local provider and the content being accessed. The process begins in phase 610 and proceeds to phase 620, where the content accessor requests content from a local provider with a content identifier comprised in the request message. In phase 630, the local provider locates the content using the content identifier. In case the content is determined to not exist, processing advances to phase 640 and 650, where the local provider informs the accessor of this and the process ends. On the other hand if the content is determined to exist, processing advances to phase 660. The local provider generates a first DRM key and obtains a DRM header. The DRM is verified, and in case the verification fails processing advances to phase 670 where the content accessor is informed of this and processing ends. On the other hand if DRM verification succeeds, processing advances to phase 680 and the content accessor is granted access to the content, which may comprise, for example, an audio, video, or audiovisual presentation.

When the third method is used, at least one of the following may apply:

1) the content has been delivered to the content accessor from the server or from an external supplier. 2) the client is able to use the content without leaving it in an unprotected state. 3) the content is provided in a format that cannot be stored for later access, and 4) the content DRM is accessed only when the content needs to be shown or played.

Figure 7 illustrates different DRM levels. DRM levels may in this example be numbered from zero to five, with each level providing for different encryption and key management functionalities. Which level is used for a specific content item, may be determined from a DRM header of the content, for example. The keys described in the Figure may comprise DRM keys, for example.

Figure 8 illustrates DRM key handling options.

Figure 9 illustrates DRM layers in an example embodiment of the invention. The illustrated layers may be applied in sequence to the media layer, which may comprise a payload of the content item. To obtain access to the payload, a user may need to apply decryption operations in reverse order to the order in which encryption operations were performed. In different embodiments, at least one of the encryption layers illustrated in Figure 9 may be omitted.

Figure 10 illustrates an example DRM process sequence in an example embodiment of the invention. In the illustrated example, a set of DRM encryption layers such as the one illustrated in Figure 9 is opened in phases to ultimately allow access to the media, that is the content payload.

It should be noted that in the above, a "server" may take different forms depending on the embodiment. In particular, alternatively to a fixed computer residing in a network, in some embodiments a server may comprise a peer device to the client device, such as for example where the client device is a tablet or smartphone device, the server may also be a tablet or smartphone device.

ABSTRACT

According to an example embodiment of the invention, there is provided a system for providing access to access restricted content to a user, the system including a communication arrangement operable to receive a content request message, the content request message including a content identifier, a processor configured to cause a first determination to be performed to yield a positive or a negative result, a validation module configured to, in response to the first determination yielding a positive result, obtain a first digital rights management key, the processor being further configured to cause a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, the validation module is configured to cause access to the access restricted content to be provided to the user.

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INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

☒ The patents, publications, or other information submitted for consideration by the Office are listed on the PTO-SB08(s) attached hereto.

II. COPIES OF CITED DOCUMENTS

☒ Copies of all of the foreign patent documents and non-patent literature are included.

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III. CONCISE EXPLANATION OF THE RELEVANCE

☒ For Documents in the English language listed on the attached PTO-SB08(s) it is believed that no statement of relevancy is required.

☐ The following foreign language documents correspond to the indicated English language documents:

Foreign language document	Corresponding English language document

Therefore, it is believed that this in conjunction with the indicated English language documents satisfies the relevancy requirement.

☐ An English language version of a search report or action that indicates the degree of relevance found by the foreign office is attached, it is believed that this satisfies the requirement for a concise explanation of the corresponding documents. See MPEP 609(III)(A)(3).

☐ A concise explanation of foreign language documents not covered by an indication above is as follows:

* 0 Additional page(s) of explanation are attached.

IV. STATEMENT UNDER 37 CFR 1.97(e)

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☐ [a fee as required by 37 C.F.R. §1.17(p) and a statement in accordance with 37 CFR 1.97(e) as indicated above is attached.

If the Examiner has any questions concerning this Information Disclosure statement they are requested to contact the undersigned. If it is determined that this Information Disclosure Statement has been filed under the wrong rule, the Office is requested to consider this statement under the proper rule.

Respectfully submitted,

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 1

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U.S. PATENT DOCUMENTS

Examiner initial *	Cite No.	Document Number Number - Kind Code [2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US-2014059156 - A1	02-27-2014	FREEMAN J. R. II et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initial *	Cite No. 1	Foreign Patent Document Country Code [3] Number [4] Kind Code (if known) [5]	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	2	EP 1189432 - A2	03-20-2002	MATSUSHITA ELECTRIC IND (		

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(54) A hierarchical encryption scheme for secure distribution of predetermined content

(57) A method is provided for distributing an electronic data set of predetermined content. The method includes partitioning the electronic data set into a plurality of files. The electronic data set has at least a first file which represents a version of the predetermined content. The plurality of files are differentially encrypted and distributed. The first encrypted file of the plurality of encrypted files is selected for decryption and the selected first encrypted file of the plurality of encrypted files is decrypted with a decryption key to recover the version of the predetermined content. The entire electronic data set is transmitted to a customer but only the decryption keys needed to decode a selected version are provided. Thus, the customer selects and pays for a version having desired qualities while encrypted data that may be used to recover all versions of the content. Higher quality versions of the content may be provided by transmitting only the keys needed to decode the higher quality versions in response the customer paying the appropriate fee.

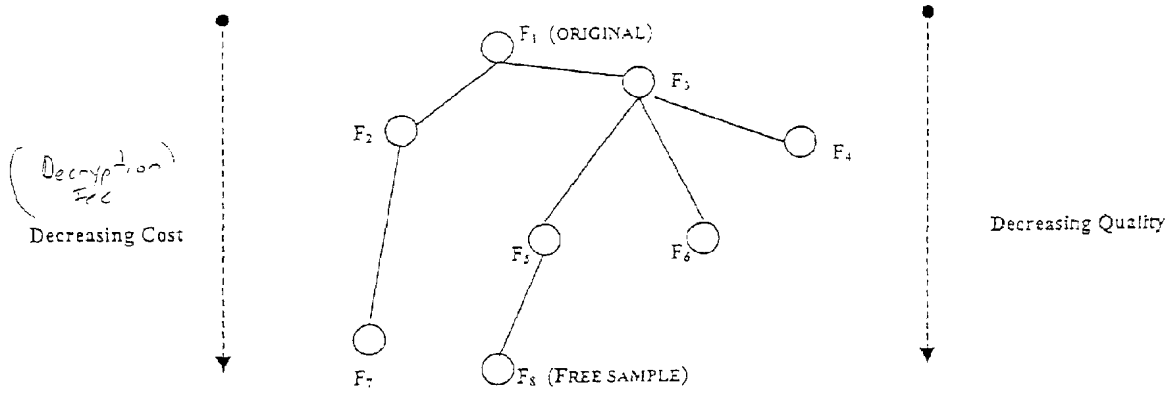


FIG. 1

EP 1 189 432 A2

Description

BACKGROUND OF THE INVENTION

[0001] The invention relates to a secure framework for the distribution of an electronic data set. More particularly, this invention relates to a method of distributing predetermined electronic content as a hierarchy of separately encrypted files.

[0002] Content, such as music, images, text and video programming is increasingly distributed electronically via network such as a global information network (e.g. the Internet) or a recordable medium in the form of an electronic data set. The advent of DVD (digital versatile disc) technology and MP3 (MPEG audio layer 3) coding technology in particular has yielded electronic data capable of near perfect reproduction of the original content. Yet, often a consumer may not desire such high-quality electronic data. High-quality reproduction of predetermined content can be cost prohibitive, as many emerging technologies require upgraded and/or costly hardware components.

[0003] Additionally, piracy of electronic data has become especially burdensome to content providers and distributors of such high-quality electronic data. While piracy has plagued the industry since its inception, typically, the quality of the reproduction degrades with each successive generation. With digital content, however, the quality of the reproduced content is the same as the original. Thus, what may have been a single incident of copying for analog content may be the first step in a copying scheme that expands geometrically with each additional level.

[0004] Accordingly, there is a need for a distribution scheme in which varying levels of electronic data set resolutions can be readily and securely provided in a single package for distribution to consumers.

SUMMARY OF THE INVENTION

[0005] The present invention comprises a method of distributing an electronic data set representing predetermined content. The method comprises partitioning the electronic data set into a plurality of files. At least a first file represents a version of the predetermined content. The plurality of files are encrypted differently and distributed. At least one encrypted file of the plurality of encrypted files is selected for decryption based on a desired level of quality. The selected encrypted file is decrypted with a decryption key that is specific to the desired level of quality to recover the desired version of the predetermined content.

[0006] In another aspect of the present invention, a method is provided which comprises partitioning a digital electronic data set into a plurality of files, the plurality of files includes at least a first file which represents a first version of the predetermined content and a further file which represents a second version of the predetermined content. The plurality of files are processed through the application of a transfer function which results in a second version of the content.

[0007] According to another aspect of the invention, the second version of the content is processed through the application of a further transfer function to obtain a third version of the content having lesser quality than the second version and the various versions are separately encrypted. The encrypted plurality of files are distributed as a set.

[0008] According to yet another aspect of the invention and at least one compressed file of the plurality of compressed files is selected to be decrypted based on a desired level of quality. The selected one of the plurality of compressed files is decrypted using a decryption algorithm that is specific to the desired level of quality to recover a version of the predetermined content having the desired level of quality.

[0009] According to another aspect of the invention, the transfer function is a compression algorithm that produces a version of the content that may be represented in a fewer number of bits.

[0010] According to another aspect of the invention, the transfer function is a low-pass filter algorithm that reduces high-frequency components of the content.

[0011] According to another aspect of the invention, the further transfer function is a compression algorithm that produces a version of the content that may be represented in a fewer number of bits.

[0012] According to another aspect of the invention, the further transfer function is a low-pass filter algorithm that reduces high-frequency components of the content.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0013] The foregoing summary as well as the following detailed description of preferred embodiments of the invention, will be better understood when read in conjunction with the appended drawings. For the purpose of illustrating the invention, there is shown in the drawings embodiments which are presently preferred. It should be understood, however, that the invention is not limited to the precise arrangements and instrumentalities shown. In the drawings:

Fig. 1 hierarchical tree diagram of differentially encoded files (F_k) of a package P in accordance with the present

invention;

Fig. 2 is a block diagram of a hierarchical distribution scheme in accordance with the present invention;

Fig. 3 is a block diagram of a transfer function encoding system for encoding an input signal of predetermined content; and

Fig. 4 is a block diagram of a differential encoding system in accordance with Fig. 3 for differentially encoding an input signal of predetermined content.

DETAILED DESCRIPTION OF THE INVENTION

[0014] Certain terminology is used herein for convenience only and is not to be taken as a limitation on the present invention. The term "differential encoding" or "differentially translated" is defined as the process of encrypting data files and transmitting only the data corresponding to the difference between related encrypted files. The term "predetermined content" is defined broadly to include any audio, video, or textual based material. The term "augment" is defined as aggregating a first decrypted data file with the difference in quality between the first data file and a second related decrypted data file. In the drawings, the same reference numerals are used for designating the same elements throughout the several figures.

[0015] The present invention provides a method for distributing an electronic data set of predetermined content. The method comprises partitioning the electronic data set into a plurality of files. The electronic data set includes at least a first file which represents a version of the predetermined content. The plurality of files are encrypted differently and distributed. Each of the files or each selected combination of the files represents a version of the content having a different level of quality than any other file or selected combination of files.

[0016] One of the encrypted files or a combination of files from the plurality of encrypted files is selected for decryption and the selected first encrypted file or combination of files are decrypted with a decryption key provided in accordance with a fee structure to recover one of a plurality of versions of the predetermined content. In this way, a distribution scheme is provided in which varying levels of electronic data resolution can be securely provided in a single package.

[0017] Referring now to the drawings, and more particularly Fig. 1, a heirarchical diagram in accordance with the present invention is shown. An electronic data set wherein predetermined content is represented in electronic form and partitioned into independent subsets (predetermined content typically being video, audio, lyrics, etc) is provided. Depending on the application, the subsets may have different spatial, color, time resolutions, or different compression levels. In Fig. 1, "F" denotes an illustrative one of these data subsets. F_1, F_2,....,F_k denote variations of F with differing levels of quality to be distributed securely in accordance with the present invention. These files are arranged schematically at the nodes of a (graph theoretic) tree as shown in Fig. 1. The left margin shows the direction of decreasing cost (i.e., fee for purchasing versions from F; to F_8), the right margin shows decreasing quality from F_1 to F_8. The vertical position of the nodes corresponding to a relative level of file "quality" or resolution. The top-most node represents the best quality data (only eight nodes are shown for illustration purposes). The lower-most node F_8 represents a lowest quality of F. This version may, for example, be provided to consumers as a free sample.

[0018] In Figure 1, the symbol F_1 represents the version having the highest quality. It is contemplated that there may be several F_n of quality levels, which are not further reduced by any lower quality version. In Fig. 1, in general, the lines connecting nodes F_n and F_m illustrate that if one is obtained from the other by a reduction in file quality. Following a path from a bottom-most node to the top of the tree, only the data corresponding to the difference of quality (i.e., differential encoding) has to be stored as a file F, a significant reduction in the amount of information to be transmitted to the consumer. The version of F recovered by the consumer is dependent upon a decryption key obtained from the distributor. The fee structure provides higher resolution versions for an increased cost. It is contemplated, moreover, that quality may be measured along multiple mutually orthogonal dimensions. For example, an audio recording may be processed both to reduce the resolution of the samples, which results in a version having less dynamic range, and/or to reduce the frequency spectrum of the recording. Processing along the multiple dimensions may be combined such that a reduced-resolution version may be further processed to provide a version having a lesser range of frequencies.

[0019] The encryption method employs keys which may be publicly distributed and or privately distributed as known to those skilled in the art for decrypting one or more files of a data set. Alternatively, differing versions of files F of a data set may be made available on a network such as the Internet through hyper text transfer protocol for example, whereby a decryption level is determined based on the presence of a particular digital certificate or detected cookie/browser based token for use in recovering a corresponding file version.

[0020] The data files themselves may, for example, be encrypted according to a symmetric encryption algorithm such as triple DES (data encryption standard) and the symmetric keys needed to decode the data may, themselves,

be encrypted using a stronger encryption algorithm. One exemplary encryption technique for encrypting the keys is disclosed by U.S. Patent Application No. 5,497,423 entitled METHOD OF IMPLEMENTING ELLIPTICAL CURVE CRYPTOSYSTEMS IN DIGITAL SIGNATURES OR VERIFICATION AND PRIVACY COMMUNICATION the subject matter of which is incorporated herein by reference in its entirety for its teachings on data encryption. However, those skilled in the art recognize that the distribution scheme defined herein is not limited to a particular encryption algorithm. In a practical implementation, a user may be assigned a single key (e.g. a private key or digital certificate) by the provider. When a user selects a particular work, the provider transmits the entire set of files to the user, each file encrypted with a distinct symmetric key. In response to the selection of a specific version of the work, the provider encrypts and transmits only the key or keys that are needed to decode that version with the key that is specific to the user. These encrypted keys are decrypted by the user and used to decrypt the desired version of the work. A higher quality version of the work may be obtained by simply requesting and receiving the keys needed to decode that version at the user has all files for every version.

[0021] Referring now to Fig. 2, an embodiment is shown for securely distributing predetermined content in accordance with the present invention. Files C_1, C_2....., C_k are created by partitioning predetermined content to be distributed in accordance with the present invention and encrypting the partitioned files.

$$F_n=C_n \text{ for leaves and } F_m=C_m + F_n \text{ for connected nodes} \qquad \text{(Equation 1)}$$

[0022] For connected nodes (+ represents an operation to augment two files). Where $C_1^*,C_2^*,....,C_k^*$ are aggregated to form the file P which is securely distributed the file P as a single package. The package P can be directly transmitted to a consumer as an electronic data set, for example, via a network connection, or via a recordable medium such as a DVD (Digital Versatile Disc).

[0023] By way of example, Fig. 3 shows is a block diagram of a transfer function encoding system for encoding an input signal of predetermined content in a manner discussed above. The type of transfer function *f*(s) is dependent upon the input data to be processed and can be any encryption, compression, line filter or similar translation function known to those in the art. In the exemplary embodiment shown in Figure 3, the input signal is processed by the transfer function *f*(s) 310 to produce the lower-quality output data LQ. The data LQ is subtracted or otherwise removed from the input data by the differential means 312 to provide a differential data set Aug Out. To recover the original data (IN signal) the LQ (low quality signal) signal is augmented with the Aug Out signal. The augmentation operator (not shown) performs the inverse of the function performed by the differential means 312.

[0024] As shown in Fig. 4, a plurality of transfer functions f(s) can be cascaded to produce base data and augmentation data for several different versions. In Figure 4, the transfer function *f*(s) may be a compression function or a low-pass filter. In Fig 4, Aug_1 represents augmentation data provided by the differential means 412 that may be combined with the data provided by the transfer fanction f_1(s) 410 to reproduce the original content. In the same way, Aug_2 represents augmentation data provided by the differential means 416 that may be combined with the data provided by the transfer function f_2(s) 414 to reproduce the data set provided by the transfer function f_1(s) 410. It is contemplated that either the original content and the output data provided by each of the cascaded transfer functions may be provided as the separately encrypted files, or the output data provided by the last transfer function f_n(s) and each of the augmentation files may be provided as the separately encrypted files. In this instance the file provided by the last transfer function and all of the augmentation files up to the desired version would be needed to recover the desired version. In Fig. 4,

[0025] Upon reception of the entire file P, a consumer decrypts a specific quality or resolution of the original data set F in accordance with a provided decryption key(s), The resulting resolution of the data set F will depend upon the decryption key utilized, higher resolution decryption keys being provided by the distributor for a higher fee relative to low resolution decryption keys. For example, suppose that the consumer has paid for receiving the version F_i. In order to recover this version, the consumer decrypts certain files C_{i1}^*, C_{i2}^*.....C_{ij}^*. Then, using equation 1 above the consumer will recover F_i.

[0026] As can be appreciated, the distribution can provide low quality versions of predetermined content at a minimal cost for sampling purposes. Moreover, the form of equation (1) and the methods for creating the files F_1, F_2,.....,F_k can be made public at the discretion of the distributor.

[0027] It will be appreciated by those skilled in the art that changes could be made to the embodiments described above without departing from the broad inventive concept thereof. For example, the proposed distribution method while primarily disclosed for audio/video applications, should be applicable to any electronic file distribution. It is underestood, therefore, that this invention is not limited to the particular embodiments disclosed, but is intended to cover modifications within the spirit and scope of the present invention.

[0028] For example, the version desired by the customer may not be explicitly selected but be determined as a

function of the decoding hardware that the customer is using. For example, a particular audio player may be able to reproduce signals in the range of 10 Hz to 12 000 Hz. If the content provider knows the type of player being used, only a version appropriate for that player may be provided. In this instance, the customer would receive the entire file set containing data for all possible versions but receive only the keys needed to decode the version that is band-limited to 12 000 Hz.

[0029] In addition, while the transfer function f(s) has been described in terms of dynamic range compression and frequency-band compression, other types of compression are contemplated. For example, if the content being distributed is a dictionary, the transfer function may selectively delete words based on their relative frequency of use such that the data provided by the final cascaded transfer function is only the most frequently used words and the augmentation data sets include entries for words that are used less and less frequently.

Claims

1. A method of distributing an electronic data set representing predetermined content, the method comprising:

   partitioning the electronic data set into a plurality of files, including at least one file which represents a version of the predetermined content;

   encrypting the plurality of files differently;

   distributing the encrypted plurality of files;

   selecting the one encrypted file of the plurality of encrypted files to decrypt;

   receiving a decryption key specific to the one encrypted file responsive to the selection; and

   decrypting the selected first encrypted file of the plurality of encrypted files using the decryption key to recover the version of the predetermined content.

2. A method according to claim 1 further including the step of :

   decrypting a further file of the plurality of files and augmenting the decrypted one encrypted file with the decrypted further file to recover an augmented version of the predetermined content.

3. A method according to claim 2 wherein the one file is encrypted according to a symmetric encryption algorithm using a first key and the further file is encrypted according to the symmetric encryption algorithm using a second key different from the first key.

4. A method according to claim 3, wherein the first key and the second key are encrypted with an asymmetric encryption algorithm using a key that is peculiar to a customer.

5. A method of claim 4 wherein the key used by the asymmetric encryption algorithm is a digital certificate.

6. A method according to claim 1 wherein the encrypted plurality of files are distributed in digital versatile disc (DVD) format.

7. A method according to claim 1 wherein the encrypted plurality of files are distributed via a global information network.

8. A method of claim 1 wherein the electronic data set is audio data and the step of partitioning the electronic data set into a plurality of files, including at least one file which represents a version of the predetermined content includes processing the audio data through a cascade connection of low-pass filters, each low-pass filter having a smaller pass-band than previous low-pass filters in the cascade connection.

9. A method according to claim 1 wherein the electronic data set is audio data and the step of partitioning the electronic data set into a plurality of files, including at least one file which represents a version of the predetermined content includes processing the audio data through a cascade connection of compression filters, each compression filter

providing output samples having fewer digital bits than corresponding input samples.

10. A method according to claim 1 further including the step of distributing the encrypted plurality of files as a single package.

11. A method of distributing an electronic data set representing predetermined content in digital form, the method comprising:

partitioning the electronic data set into a plurality of files, including at least a first file which represents a first version of the predetermined content and a further file which represents a second version of the predetermined content;

encrypting the plurality of files in accordance with a first encryption algorithm;

encrypting at least the second version in accordance with a second encryption algorithm;

distributing the encrypted plurality of files;

selecting at least one encrypted file of the plurality of encrypted files to decrypt; and

decrypting the selected one of the plurality of encrypted files with the first decryption algorithm to recover the first version of the predetermined content.

12. A method according to claim 11 further including the step of :

decrypting the second version in accordance with a second decryption algorithm, corresponding to the second encryption algorithm, and augmenting the decrypted second version with the decrypted first version to recover an augmented second version of the predetermined content.

13. A method according to claim 11 wherein the second version is of a lower resolution than the augmented second version.

14. A method according to claim 13 wherein the second version is of a narrower bandwidth than the augmented second version.

15. A method according to claim 11 wherein the step of partitioning the partitioning the electronic data set into a plurality of files, including at least a first file which represents a first version of the predetermined content and a further file which represents a second version of the predetermined content includes processing the predetermined content according to first and second orthogonal transfer functions each of which produces output data having lower quality than the predetermined content.

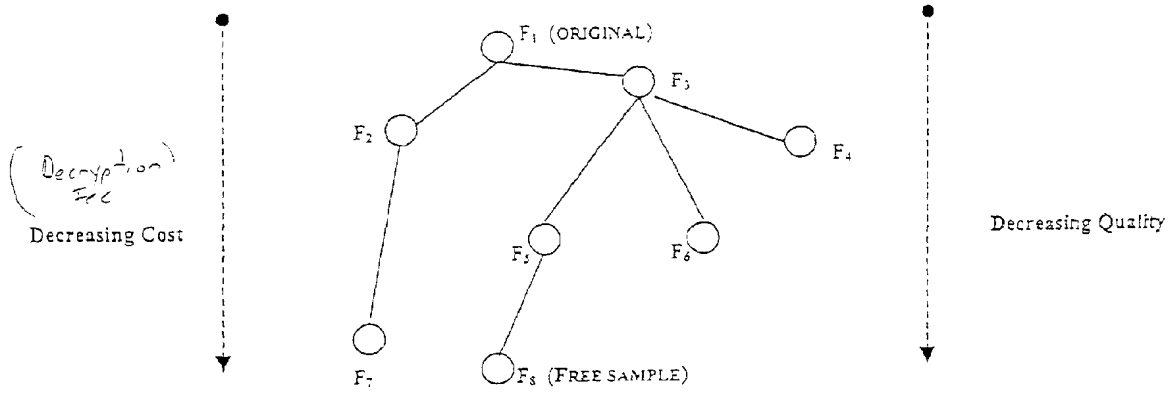

Decreasing Cost
F1 (ORIGINAL)
F2
F3
F4
F5
F6
F7
F8 (FREE SAMPLE)
Decreasing Quality

FIG. 1

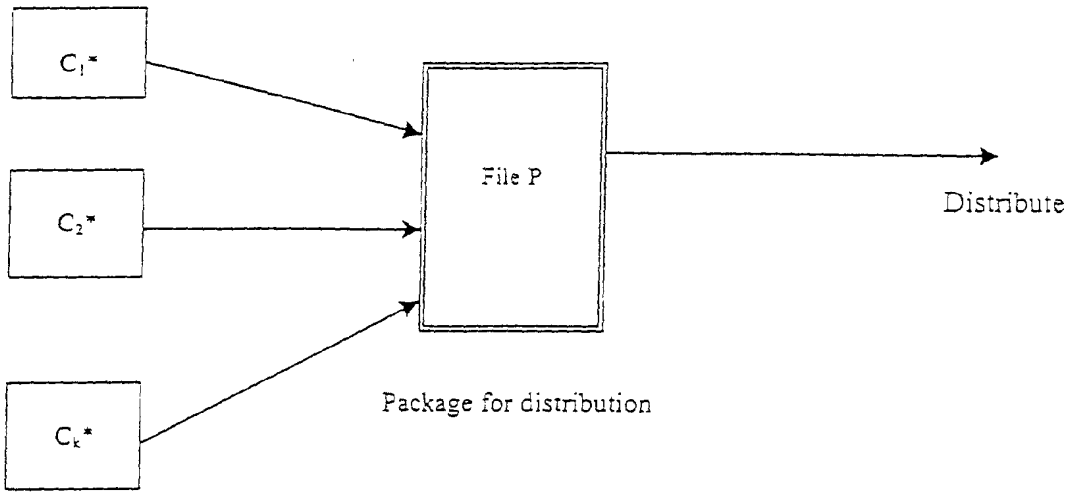


FIG. 2

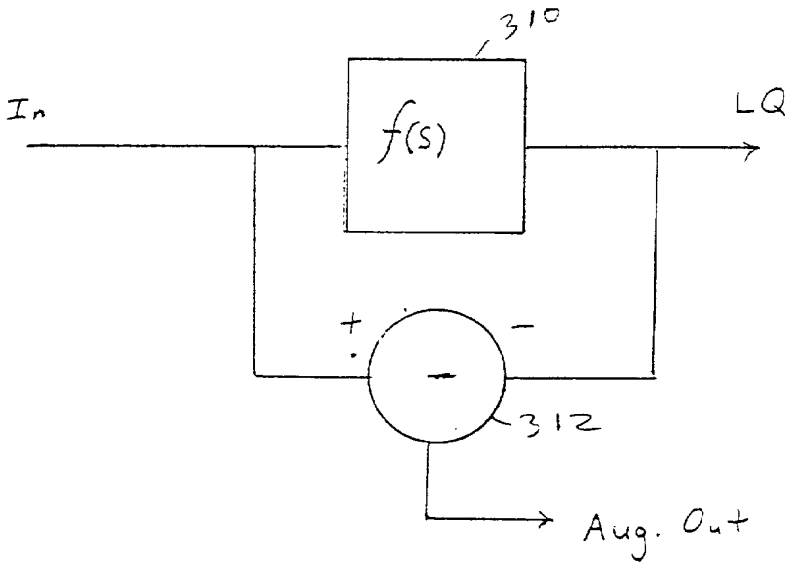


FIG. 3.

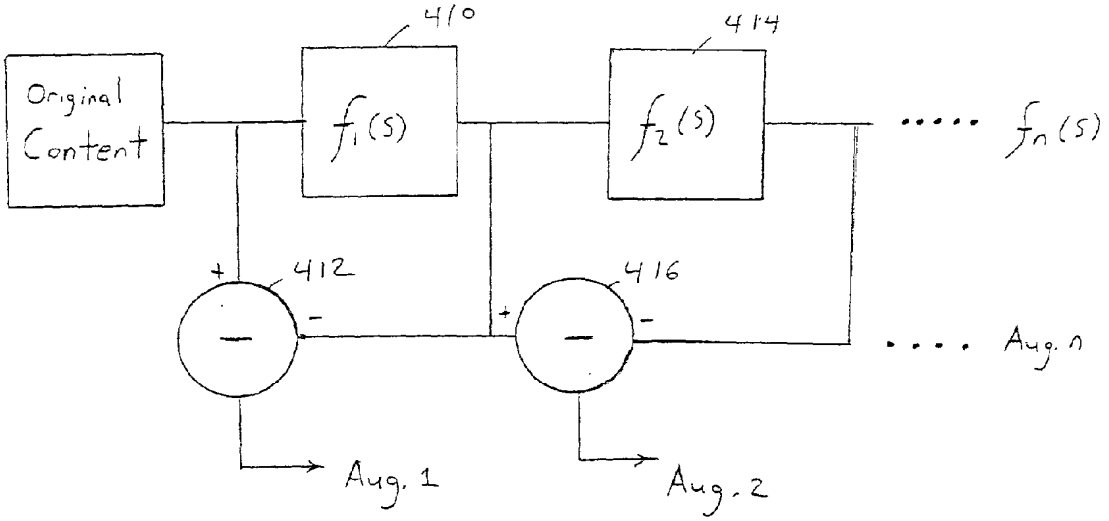


FIG. 4

Electronic Patent Application Fee Transmittal

Application Number:	14591952
Filing Date:	08-Jan-2015
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Filer:	Matthew Alan Swanson/Ross Worrell
Attorney Docket Number:	SCIH 2 US

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 2 months with $0 paid	2252	1	300	300
Miscellaneous:				
RCE- 1st Request	2801	1	600	600
		Total in USD ($)		**900**

Electronic Acknowledgement Receipt

EFS ID:	28407067
Application Number:	14591952
International Application Number:	
Confirmation Number:	5164
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Customer Number:	95002
Filer:	Matthew Alan Swanson/Ross Worrell
Filer Authorized By:	Matthew Alan Swanson
Attorney Docket Number:	SCIH 2 US
Receipt Date:	21-FEB-2017
Filing Date:	08-JAN-2015
Time Stamp:	06:09:33
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$900
RAM confirmation Number	022117INTEFSW06103100
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	SCIH2US_2017-02-21_SB0030EFS_RCE_transmittal.pdf	91060 6dee8dbf46283d954ed028f7e85aa5a981bd9e3d	no	3
Warnings:					
This is not a USPTO supplied RCE SB30 form.					
Information:					
2		SCIH2US_2017-02-21_RCE.pdf	168560 90483ebf7538d03e86f1e036921b67f7f677a7f1	yes	13

Multipart Description/PDF files in .zip description

Document Description	Start	End
Applicant Arguments/Remarks Made in an Amendment	8	13
Specification	7	7
Claims	2	6
Amendment Submitted/Entered with Filing of CPA/RCE	1	1

Warnings:					
Information:					
3	Extension of Time	SCIH2US_2017-02-21_AIA0022_Extension.pdf	134376 70cdf298782a15f57f447de2014b097eb1df6507	no	2
Warnings:					
Information:					
4	Specification	SCIH2US_2017-02-21_Specification_substitute.pdf	139067 7953e35dd6e003a68123029a9a19324afde9db8c	no	20
Warnings:					
Information:					

5	Specification	SCIH2US_2017-02-21_Specification_substitute_annotated.pdf	143062 495f111b79f2c21aa7b55845064f23e120c504ec	no	20
Warnings:					
Information:					
6	Transmittal Letter	SCIH2US_2017-02-21_IDS_submission.pdf	147251 c690ea06fc43de0769fe0637c79271745496fce1	no	4
Warnings:					
Information:					
7	Information Disclosure Statement (IDS) Form (SB08)	SCIH2US_2017-02-21_IDS_form.pdf	75078 3dcc0f51686864be4c2b2d2a64689a74fc9a2e74	no	1
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
8	Foreign Reference	EP1189432A2.pdf	426252 25ee3a7bef4c7803764ebcb16de4044054548e64	no	10
Warnings:					
Information:					
9	Fee Worksheet (SB06)	fee-info.pdf	32411 5b212dcba7bd5223654a2a88255a5d9bdb53cd11	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1357117		

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If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/591,952	Filing Date 01/08/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT **02/21/2017**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 10	Minus	** 20	= 0	X $40 =	0
Independent (37 CFR 1.16(h))	* 3	Minus	***4	= 0	X $210 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	0

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
BRENDA J. DENNY

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/591,952	01/08/2015	Lauri Valjakka	SCIH 2 US	5164

95002 7590 04/13/2017

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EXAMINER
BAYOU, YONAS A

ART UNIT	PAPER NUMBER
2434	

NOTIFICATION DATE	DELIVERY MODE
04/13/2017	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

posti@seppolaine.fi
matthew.swanson@seppolaine.fi

Notice of Non-Compliant Amendment (37 CFR 1.121)	Application No.	Applicant(s)
	14/591,952	VALJAKKA ET AL.
	Examiner	Art Unit
	YONAS BAYOU	2434

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

The amendment document filed on *21 February 2017* is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121 or 1.4. In order for the amendment document to be compliant, correction of the following item(s) is required.

THE FOLLOWING MARKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☐ 1. Amendments to the specification:
  - ☐ A. Amended paragraph(s) do not include markings.
  - ☐ B. New paragraph(s) should not be underlined.
  - ☐ C. Other _____.
- ☐ 2. Abstract:
  - ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
  - ☐ B. Other _____.
- ☐ 3. Amendments to the drawings:
  - ☐ A. The drawings are not properly identified in the top margin as "Replacement Sheet," "New Sheet," or "Annotated Sheet" as required by 37 CFR 1.121(d).
  - ☐ B. The practice of submitting proposed drawing correction has been eliminated. Replacement drawings showing amended figures, without markings, in compliance with 37 CFR 1.84 are required.
  - ☐ C. Other _____.
- ☒ 4. Amendments to the claims:
  - ☐ A. A complete listing of all of the claims is not present.
  - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
  - ☐ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following status identifiers: (Original), (Currently amended), (Canceled), (Previously presented), (New), (Not entered), (Withdrawn) and (Withdrawn-currently amended).
  - ☐ D. The claims of this amendment paper have not been presented in ascending numerical order.
  - ☒ E. Other: *the amendments to the claims raise requirement for Restriction/Election (claims 6-9 and 10-15 are distinct inventions). The added claims 10-15, this section of the amendments raises requirement for Restriction/Election*.
- ☒ 5. Other (e.g., the amendment is unsigned or not signed in accordance with 37 CFR 1.4):

  _____

For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714.

TIME PERIODS FOR FILING A REPLY TO THIS NOTICE:

1. Applicant is given **no new time period** if the non-compliant amendment is an after-final amendment or an amendment filed after allowance. If applicant wishes to resubmit the non-compliant after-final amendment with corrections, the **entire corrected amendment** must be resubmitted.
2. Applicant is given **two months** from the mail date of this notice to supply the correction, if the non-compliant amendment is one of the following: a preliminary amendment, a non-final amendment (including a submission for a request for continued examination (RCE) under 37 CFR 1.114), a supplemental amendment filed within a suspension period under 37 CFR 1.103(a) or (c), and an amendment filed in response to a *Quayle* action. If any of above boxes 1. to 4. are checked, the correction required is only the **corrected section** of the non-compliant amendment in compliance with 37 CFR 1.121.

   Extensions of time are available under 37 CFR 1.136(a) only if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action.

   Failure to timely respond to this notice will result in:
   Abandonment of the application if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action; or
   Non-entry of the amendment if the non-compliant amendment is a preliminary amendment or supplemental amendment.

/YONAS BAYOU/ Primary Examiner, Art Unit 2434	

Notice of Non-Compliant Amendment (37 CFR 1.121)

Notice of Non-Compliant Amendment (37 CFR 1.121)	Application No.	Applicant(s)
	14/591,952	VALJAKKA ET AL.
	Examiner	Art Unit
	YONAS BAYOU	2434

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

The amendment document filed on *21 February 2017* is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121 or 1.4. In order for the amendment document to be compliant, correction of the following item(s) is required.

THE FOLLOWING MARKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☐ 1. Amendments to the specification:
  - ☐ A. Amended paragraph(s) do not include markings.
  - ☐ B. New paragraph(s) should not be underlined.
  - ☐ C. Other _____.
- ☐ 2. Abstract:
  - ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
  - ☐ B. Other _____.
- ☐ 3. Amendments to the drawings:
  - ☐ A. The drawings are not properly identified in the top margin as "Replacement Sheet," "New Sheet," or "Annotated Sheet" as required by 37 CFR 1.121(d).
  - ☐ B. The practice of submitting proposed drawing correction has been eliminated. Replacement drawings showing amended figures, without markings, in compliance with 37 CFR 1.84 are required.
  - ☐ C. Other _____.
- ☒ 4. Amendments to the claims:
  - ☐ A. A complete listing of all of the claims is not present.
  - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
  - ☐ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following status identifiers: (Original), (Currently amended), (Canceled), (Previously presented), (New), (Not entered), (Withdrawn) and (Withdrawn-currently amended).
  - ☐ D. The claims of this amendment paper have not been presented in ascending numerical order.
  - ☒ E. Other: *the amendments to the claims raise requirement for Restriction/Election (claims 6-9 and 10-15 are distinct inventions). The added claims 10-15, this section of the amendments raises requirement for Restriction/Election*.
- ☒ 5. Other (e.g., the amendment is unsigned or not signed in accordance with 37 CFR 1.4):

  _____

For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714.

TIME PERIODS FOR FILING A REPLY TO THIS NOTICE:

1. Applicant is given **no new time period** if the non-compliant amendment is an after-final amendment or an amendment filed after allowance. If applicant wishes to resubmit the non-compliant after-final amendment with corrections, the **entire corrected amendment** must be resubmitted.
2. Applicant is given **two months** from the mail date of this notice to supply the correction, if the non-compliant amendment is one of the following: a preliminary amendment, a non-final amendment (including a submission for a request for continued examination (RCE) under 37 CFR 1.114), a supplemental amendment filed within a suspension period under 37 CFR 1.103(a) or (c), and an amendment filed in response to a *Quayle* action. If any of above boxes 1. to 4. are checked, the correction required is only the **corrected section** of the non-compliant amendment in compliance with 37 CFR 1.121.

   Extensions of time are available under 37 CFR 1.136(a) only if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action.

   Failure to timely respond to this notice will result in:
   Abandonment of the application if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action; or
   Non-entry of the amendment if the non-compliant amendment is a preliminary amendment or supplemental amendment.

/YONAS BAYOU/ Primary Examiner, Art Unit 2434	

Notice of Non-Compliant Amendment (37 CFR 1.121)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	: 14/591,952	Confirmation No. : 5164
First Named Inventor	: Lauri Valjakka	
Filed	: 01/08/2015	
TC/AU	: 2434	
Examiner	: Bayou, Yonas A	
Attorney Docket No.	: SCIH 2 US	

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTARY AMENDMENT IN RESPONSE TO NOTICE OF NON-COMPLIANT AMENDMENT

In response to the Notice of Non-Compliant Amendment dated April 13, 2017 please replace the amendment filed February 21, 2017 with this supplementary amendment.

A Request for Continued Examination (RCE) was filed, along with the appropriate fees on February 21, 2017. Along with the RCE a substitute specification and annotated substitute specification were filed. These previous submissions are not provided again herewith as it is believe that this amendment should no longer suffer from the deficiencies noted in the Notice of Non-Compliance and therefore this amendment and the previous submissions are in condition for entry.

Please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Amendments to the Specification are addressed on page 4 of this paper.

Remarks/Arguments begin on page 5 of this paper.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1 – 5. (Canceled)

6. (Currently Amended) An apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to:
   - obtain an access restricted content from at least one of a content database and a content providing server;
   - obtain a first digital rights management key from the content database;
   - derive~~, using the first digital rights management key, from the access restricted content~~ information describing encryption properties of the access restricted content from the access restricted content using the first digital rights management key, and
   - derive a second digital rights management key from the access restricted content~~,~~ using the information describing encryption properties of the access restricted content~~, from the access restricted content at least one of a content payload and a second digital rights management key~~.

7. (Currently Amended) An apparatus according to claim 6, wherein the second digital rights management key is at least in part operable to obtain ~~the~~ a content payload from the access restricted content.

8. (Original) An apparatus according to claim 6, wherein the apparatus is caused to obtain the first digital rights management key either by receiving it from a server or by generating it at least in part from at least one of environmental parameters and parameters of the access restricted content.

9. (Currently Amended) A method, comprising:
   - obtaining an access restricted content from at least one of a content database and a content providing server;
   - obtaining a first digital rights management key from a content database;
   - deriving, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content, and
   - deriving, using the information describing encryption properties of the access restricted content, from the access restricted content ~~at least one of a content payload and~~ a second digital rights management key.

AMENDMENTS TO THE SPECIFICATION

Please replace the specification with the substitute specification submitted on February 21, 2017. Also submitted on February 21, 2017 is an annotated substitute specification showing the changes to the specification relative to the specification as originally filed. As can be seen in the annotated substitute specification, ***the substitute specification contains no new matter.***

As outlined in the annotated substitute specification, the specification has been amended to correct a typographical error on page 9 and two typographical errors on page 16. On page 9, 'The processor 204' has been changed to 'The processor 24'. On page 16, line 1, 'illustrates' has been changed to 'illustrated' and on line 5 'phase 440' has been changed to 'phase 430'.

REMARKS/ARGUMENTS

Claims 6 – 9 are pending. Claims 1 – 5 have been canceled herein. Claims 6, 7, and 9 have been amended herein. In response to the Notice of Non-Compliant Amendment dated April 13, 2017, the previously submitted and non-entered claims 10 – 15 have been removed from this supplementary amendment and their entry is no longer requested. As such, the listing of claims does not include any mention of claim numbers 10 – 15. ***No new matter has been added.***

Regarding Rejections under 35 U.S.C. § 112

Claims 6 – 8 are rejected under 35 U.S.C. § 112(b) as being indefinite to particularly point out and distinctly claim the subject matter which the inventor or joint inventor regards as the invention. More specifically, the Examiner states that: "*Claim element " ... configured to ... " is a limitation that invokes 35 U.S.C. 112(e) or 35 U.S.C. 112 (pre-AIA), sixth paragraph. However, the written description fails to clearly link or associate the disclosed structure, material, or acts to the claimed function such that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function.*

The Applicant respectfully disagrees with the Examiner's characterization of the claimed limitation, "configured to". Read as a whole, the limitation recites "a processor, memory and program instructions configured to cause an apparatus at least to: obtain content and key and derive information from the items obtained. Clearly the configured to language links the memory, program code and processor to the acts performed throughout the claim. Thus a review of other portions of the written description would not be necessary to understand the claimed limitations.

Further, the recited claim language would be well understood within the art. The modules recited could clearly include machine code or program code for performing such actions. Not to mention, the modules cited by the Examiner are not recited by the claims and therefore would not have a bearing on a person of ordinary skill's interpretation of the claim language as presently recited.

Finally, even if a person of ordinary skill in the art would find it necessary to consult the description to interpret the claim language, the structure recited within the

specification on page 9 beginning on line 29 and continuing to page 10, line 3 should provide sufficient disclosure. The disclosure therein would clearly link the disclosed structure to the claimed function in such a manner that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function.

Regarding Rejections under 35 U.S.C. § 101

Claims 6 – 9 are rejected under 35 U.S.C §101 as being ineligible subject matter. The Examiner states that the claimed invention is directed to an abstract idea in the field of An Idea Of Itself and that the claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception.

As per MPEP § 2106, step 2 of the subject matter eligibility analysis asks *"Does the claim wholly embrace a judicially recognized exception"*? The section goes on to state that *"claims directed to nothing more than abstract ideas [...] are not eligible for patent protection."* It would appear that within the analysis of the claims currently on record, the Examiner has not fully considered what the claims wholly embrace nor whether the claims are directed to nothing more than an abstract idea. Applicant thus traverses the rejection based on the fact that the claims are not directed to an abstract idea, and, even if the claims were so directed, the claims in fact include additional elements which amount to significantly more than the judicial exception.

Regarding claim 6

Independent claim 6, as amended herein, concerns an apparatus and program instructions which are used to obtain access restricted content from a database or server, obtain a DRM key from the database, derive information from the content using the key, and derive a second key from the content using that information. Clearly claim 6 as a whole does not wholly embrace an abstract idea as there are very real and non-abstract steps and limitations recited by the claim. To paraphrase the USPTO's Abstract Idea Examples, issued January 27, 2015 *"Such action does not describe an abstract concept, or a concept similar to those found by the courts to be abstract, such as a fundamental economic practice, a method of organizing human activity, an idea itself (standing alone), or a mathematical relationship."* (pg. 3)

The USPTO's July 2015 provides a chart on page 2 to '*provide further information on identifying abstract ideas*'. The chart states that "An Idea 'Of Itself'" is *"An idea standing alone such as an uninstantiated concept, plan or scheme, as well as a mental process (thinking) that "can be performed in the human mind, or by a human using a pen or paper".* At present, it is unclear to the applicant how the recited language of claim 6, requiring that a device perform real and non-abstract steps could be construed as either an uninstantiated concept or a mental process.

Even if the claims were determined to be directed to an abstract idea, the additional claim elements recited by the claim would result to significantly more than the abstract idea itself. The Examiner has stated that "*Thus, taken alone, the additional elements do not amount to significantly more than the above-identified judicial exception (the abstract idea). Looking at the limitations as an ordered combination adds nothing that is not already present when looking at the elements taken individually. There is no indication that the combination of elements improves the functioning of a computer or improves any other technology. Their collective functions merely provide conventional computer implementation.*" (Office Action, pg. 6). Applicant respectfully disagrees.

As per the Memorandum provided in the May 2016 Subject Matter Eligibility Update ('the Update') "the rejection [under 35 U.S.C. § 101] should identify the additional elements in the claim and explain why the elements taken individually and in combination do not amount to a claim as a whole that is significantly more than" an abstract idea. The Examiner states that the processor is the only additional element recite by the claims. However, this characterization would wholly ignore the access restricted content and first and second digital rights management keys as recited by the claims.

Therefore, should the Examiner wish to maintain the present rejection, Applicant respectfully requests that the Examiner establish for the record how an apparatus or method which obtains access restricted content from a database or server, obtains a DRM key from the database, derives information from the content using the key, and derives a second key from the content using that information ***is directed toward "an uninstantiated concept or mental process"*** (i.e. an abstract idea) and, if so directed, how the added limitations do not constitute significantly more than an abstract idea.

Regarding claim 9

Claim 9 recites similar subject matter as claim 6 and should be patent eligible subject matter under 35 U.S.C. § 101, for the reasons cited above with respect to claim 6.

Regarding dependent claims

As outlined above, the independent claims are not directed to a judicial exception. Therefore the dependent claims are also not drawn to a judicial exception. Even if the claims were directed to an exception, the claims clearly recite additional elements amounting to significantly more. Thus, the claims are eligible subject matter under 35 U.S.C. § 101.

Regarding Rejections under 35 U.S.C. § 102

Claims 6-9 are rejected under 35 U.S.C. § 102 (a) (1) as being anticipated by Kondareddy et al., Pub. No.: US 2012/0308008 (hereinafter Kondareddy). Applicant traverses the rejection for at least the reason that Kondareddy fails to disclose each and every element of the claims.

Claim 6, as amended, recites an apparatus which is configured to "*obtain a first digital rights management key from the content database*". Kondareddy does not appear to disclose a content database. Indeed, it appears that Kondareddy does not mention any form of database. Claim 6 also recites the limitation of "*deriving a second digital rights management key from the access restricted content using information describing encryption properties of the access restricted content*". This limitation also appears to be absent from Kondareddy.

Therefore, as the above limitations do not appear to be disclosed in Kondareddy, Kondareddy does not disclose each and every element of claim 6 as amended. For at least that reason, claim 6 should be patentable over Kondareddy.

Regarding claim 9

Claim 9, as amended, recites an apparatus which is configured to "obtain a first digital rights management key from the content database". As stated previously, Kondareddy does not appear to disclose any form of database. Also Kondareddy does not seem to disclose the limitation of deriving a second DRM key from the encryption properties of the access restricted content.

Therefore, Kondareddy does not disclose each and every element of claim 9 as amended. For at least that reason, claim 9 should be patentable over Kondareddy.

Regarding dependent claims

Claims 7 and 8 are dependent on claim 6 and therefore are patentable over Kondareddy for at least the reasons outlined above with respect to claim 6.

Reconsideration and withdrawal of the present rejections is respectfully requested.

CONCLUSION

The Applicant believes that that present application is in condition for allowance. Notice of the same is earnestly solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Matthew A. Swanson, Reg. No. 73276 at (571) 281-4850, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Respectfully submitted,

/ Matthew A. Swanson Reg. No. 73276/

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2017-05-10

Electronic Acknowledgement Receipt

EFS ID:	29242958
Application Number:	14591952
International Application Number:	
Confirmation Number:	5164
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Customer Number:	95002
Filer:	Matthew Alan Swanson/Toimi Teelahti
Filer Authorized By:	Matthew Alan Swanson
Attorney Docket Number:	SCIH 2 US
Receipt Date:	18-MAY-2017
Filing Date:	08-JAN-2015
Time Stamp:	02:54:32
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		SCIH2US_2017-05-10_RCE_supplementary_amendment.pdf	140070 14a6bfb61751b542d147627e9c6b006d0bb46bde	yes	10

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Supplemental Response or Supplemental Amendment	1	1
	Claims	2	3
	Amendment/Req. Reconsideration-After Non-Final Reject	4	10
Warnings:			
Information:			
	Total Files Size (in bytes):	140070	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/591,952	Filing Date 01/08/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT **05/18/2017**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 4	Minus	** 20	= 0	X $40 =	0
Independent (37 CFR 1.16(h))	* 3	Minus	***4	= 0	X $210 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	0

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
TAMMY D. MCBETH BROWN

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/591,952	01/08/2015	Lauri Valjakka	SCIH 2 US	5164

95002 7590 07/07/2017

Seppo Laine Oy
Itamerenkatu 3 A
Helsinki, FI00180
FINLAND

EXAMINER
BAYOU, YONAS A

ART UNIT	PAPER NUMBER
2434	

NOTIFICATION DATE	DELIVERY MODE
07/07/2017	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

posti@seppolaine.fi
matthew.swanson@seppolaine.fi
toimi.teelahti@seppolaine.fi

Office Action Summary	Application No. 14/591,952	Applicant(s) VALJAKKA ET AL.	
	Examiner YONAS BAYOU	Art Unit 2434	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05/18/2017*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *6-9* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *6-9* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *01/08/2015* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☒ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *02/21/2017*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to Applicant's Arguments /Remarks filed on 05/18/2017.

2. In the instant Amendment, claims 1-5 were previously cancelled; claims 6, 7 and 9 have been amended; and claims 6 and 9 are independent claims. Claims 6-9 have been examined and are pending. **This Action is made FINAL**.

Notice of Pre-AIA or AIA Status

3. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 02/21/2017 was filed after the mailing date of the Non-Final rejection on 09/20/2016. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Arguments

5. The rejections of claims 6-8 under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph are withdrawn as the claims have been amended.

6. The rejections of claims 6-8 under 35 U.S.C. § 101 are withdrawn as the claims have been amended.

7. Applicant's arguments, see the Applicant Arguments/Remarks, filed 05/18/2017, with respect to the rejection(s) of claim(s) 6-9 under 35 U.S.C. 102 (a) (1) as being unpatentable over Kondareddy et al., Pub. No.: US 2012/0308008 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made over Kondareddy et al., Pub. No.: US 2012/0308008 in view of Blankenbeckler et al, Pub. No.: US 2013/0268771.

Claim Objections

8. Claims 7 and 8 are objected to because of the following informalities: Claims 7 and 8 should start: -**The** apparatus…- not 'An apparatus…' which appears to have an antecedent basis issues. Appropriate correction is required.

Claim Rejections - 35 USC § 103

9. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

10. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 6-9 are rejected under 35 U.S.C. 103** as being unpatentable over Blankenbeckler et al, Pub. No.: US 2013/0268771 in view of Kondareddy et al., Pub. No.: US 2012/0308008.

Referring to claim 6, Blankenbeckler teaches an apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to:

obtain an access restricted content from at least one of a content database and a content providing server *(para. 0038 and fig. 3, content database 302);*

obtain a first digital rights management key from the content database *(paras. 0013, 0038 and fig. 3, content database stores digital certificates/DRM key);*

derive a second digital rights management key from the access restricted content; using the information describing encryption properties of the access restricted content *(para. 0101 and figs. 4-5, content key 700 (the claimed* 'a second digital rights management key'*) may be retrieved from the content metadata).*

Blankenbeckler does not explicitly disclose drive information describing encryption properties of the access restricted content from the access restricted content using the first digital rights management key.

However, in an analogous art, Kondareddy discloses drive information describing encryption properties of the access restricted content from the access restricted content using the first digital rights management key *(paras. 0022, 0034 and figs. 2-3, usage of DRM key and DRM modified encryption keys).*

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Blankenbeckler with the method and system of Kondareddy, wherein drive information describing encryption properties of the access restricted content from the access restricted content using the first digital rights management key to provide users with a means for transmitting protected content, and more particularly to transmitting protected content using HDCP keys via a wireless *link (Kondareddy: paras. 0005 and 0009).*

Referring to claim 7, Blankenbeckler and Kondareddy teach the apparatus according to claim 6. Kondareddy further teaches wherein the second digital rights management key is at least in part operable to obtain a content payload from the access restricted content key *(Kondareddy: paras. 0050-0052 and fig. 3b, recovering encrypted payload using DRM key).*

Referring to claim 8, Blankenbeckler and Kondareddy teach the apparatus according to claim 6. Kondareddy further teaches wherein the apparatus is caused to obtain the first digital rights management key either by receiving it from a server or by generating it at least in part from at least one of environmental parameters and parameters of the access restricted content (Blankenbeckler: *paras. 0013, 0038, 0101 and figs. 3-5).*

Referring to claim 9, This claim is similar in scope to claim 6, and is therefore rejected under similar rationale.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YONAS BAYOU whose telephone number is (571)272-7610. The examiner can normally be reached on m-f,7:30-5:00.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571-272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YONAS BAYOU/
Primary Examiner, Art Unit 2434
06/29/2017

Notice of References Cited	Application/Control No. 14/591,952	Applicant(s)/Patent Under Reexamination VALJAKKA ET AL.	
	Examiner YONAS BAYOU	Art Unit 2434	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2013/0268771 A1	10-2013	BLANKENBECKLER; David L.	H04L9/08	713/189
*	B	US-2012/0308008 A1	12-2012	Kondareddy; Ragu (Raghunatha)	H04L63/0471	380/273
	C	US-				
	D	US-				
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	19	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20130268771" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 14:25
S1	1	14/591952	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:42
S2	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:43
S3	367	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:45
S4	10086	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in. (access$3 with restri$4).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:46
S5	1	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in. and (access$3 with restri$4).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:46
S6	1	"SC Intelligent Holding"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:49
S7	2563	(access$3 near3 (restricted adj (content	US-PGPUB;	OR	ON	2016/06/14

		file document information resource packet video game application app)))	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			15:55
S8	2255	(access$3 near3 (restricted adj (content file document information resource packet video game application app))) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:56
S9	127	(access$3 near3 (restricted adj (content file document information resource packet video game application app))) and @ad<"20140108" and (G06F21/10).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:56
S10	5576	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:57
S11	1668	S10 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:58
S12	3	S10 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.) AND S9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:58
S13	113	(access$3 WITH (restricted adj (content file document information resource packet video game application app))).TI. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:59
S14	1	(access$3 WITH (restricted adj (content file document information resource packet video game application app))).TI. and @ad<"20140108" AND S11	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:59
S15	1	"digital rights management keys" with "access restricted content"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2016/09/15 10:54

			IBM_TDB			
S16	2	"digital rights management" with "access restricted content"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 10:56
S17	3	10/265437	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 11:11
S18	16	("5191573" | "5629980" | "5734823" | "5734891" | "5892900" | "5907288" | "5940591" | "6134662" | "6185683" | "6212633" | "6253193" | "6327660" | "6891953" | "6970849").PN. OR ("7865964").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/09/15 11:12
S19	161	"digital rights management keys"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S20	5672	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S21	1744	S20 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S22	0	"digital rights management keys" and S21	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S23	132	"digital rights management keys" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S24	6	"digital rights management keys" and @ad<"20140108" and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2016/09/15 12:09

			DERWENT; IBM_TDB			
S25	17	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 17:03
S26	4	"8495167"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 18:04
S27	1	13/723283	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 18:05
S28	0	15/199481	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/16 15:19
S29	2	14/526360	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/16 15:19
S30	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 11:46
S31	5	"second digital rights management key" and "first digital rights management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:30
S32	4	"second digital rights management key" and "first digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:31
S33	76	"second digital rights management" and "first digital rights management" and @ad<"20140108"	US-PGPUB; USPAT; USOCR;	OR	ON	2017/04/05 14:33

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S34	5753	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:34
S35	1819	S34 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:34
S36	0	"second digital rights management" and "first digital rights management" and @ad<"20140108" and S35	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:34
S37	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/26 14:42
S38	5	"20140059156"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/26 14:50
S39	38	("20020069132" | "20040252967" | "20060062363" | "20060069749" | "20070179854" | "20080095370" | "20080119132" | "20080270579" | "20080310815" | "20090254971" | "20090288112" | "20090288131" | "20100138865" | "20100169502" | "20100251305" | "20110047134" | "20110093900" | "20110103374" | "20110177773" | "20110197236" | "20110202383" | "20120042050" | "20120252352" | "20130031211" | "6016520" | "6571279" | "6671424" | "6766376" | "7403618" | "7565399" | "7630986" | "7941092" | "8078096" | "8180276" | "8385813" | "8489673" | "8745158" | "8898708").PN. OR ("9215269").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/06/26 14:50
S40	60	"1189432"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2017/06/26 14:52

			DERWENT; IBM_TDB			
S41	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:15
S42	5829	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:37
S50	5	"second Digital right management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:39
S51	4	"second Digital right management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:39
S54	3	"second drm key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:44
S55	241	((creat$4 driv$4 generat$4) near3 (drm adj (license key))) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:57
S56	1844	S42 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:58
S57	2	((creat$4 driv$4 generat$4) near3 (drm adj (license key))) and @ad<"20140108" and S56	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:58
S58	85	((creat$4 driv$4 generat$4) near3 ((drm adj (license key "second key")) key "second key") near3 (content	US-PGPUB; USPAT; USOCR;	OR	ON	2017/06/27 14:06

		information file document)) and @ad<"20140108" and S56	FPRS; EPO; JPO; DERWENT; IBM_TDB			
S60	7	from adj content	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 14:27
S66	5480	(DRM "DIGITAL RIGHT MANAGEMENT").ti. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 14:51
S70	81	(DRM "DIGITAL RIGHT MANAGEMENT").ti. and @ad<"20140108" AND ((creat$4 driv$4 generat$4 COMPUT$4) near3 (drm adj (license key)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 14:53
S73	6	"20080109368"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:46
S74	4	"first digital rights management key" and "second digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:50
S75	0	"first DRM key" and "second DRM key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:51
S76	397	"first DRM" and "second DRM" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:58
S77	0	"first DRM" and "second DRM" and @ad<"20140108" and S56	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:58
S78	7	"20150110035"	US-PGPUB;	OR	ON	2017/06/28

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			13:28
S79	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:33
S80	1196	("content protection key" "digital rights management key" "DRM key")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S81	5829	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S82	1844	S81 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S83	0	("content protection key" "digital rights management key" "DRM key") and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S84	988	("content protection key" "digital rights management key" "DRM key") and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:36
S85	107	("content protection key" "digital rights management key" "DRM key") and @ad<"20140108" and ("digital rights management").ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:36
S86	15	("content protection key" "digital rights management key" "DRM key") and @ad<"20140108" and ("digital rights management").ti. and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2017/06/28 13:37

			IBM_TDB			
S87	15	(("content protection key" "digital rights management key" "DRM key") near3 database) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:47
S88	106	(("content protection key" "digital rights management key" "DRM key" license) near5 "content database") and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:31
S89	3	"20110314488"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:33
S90	1841	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:58
S91	0	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and (acces$4 with contol$4 with right).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:59
S92	0	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and (acces$4 with contol$4).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:59
S93	0	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:59
S94	68	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and "digital rights management"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 15:00
S95	6	(driv$3 near5 key near5 (file content image video movie information document media)) and @ad<"20140108" and S82	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2017/06/28 15:45

			EPO; JPO; DERWENT; IBM_TDB			
S96	152	((generat$4 comput$4 creat$4 driv$3) near5 key near5 (file content image video movie information document media)) and @ad<"20140108" and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 15:46
S97	27	((generat$4 comput$4 creat$4 driv$3) near5 key near5 (file content image video movie information document media)) and @ad<"20140108" and S82 and DRM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 15:47
S98	3347	(DRIVE ADJ KEY) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 16:00
S99	1	(DRIVE ADJ KEY) and @ad<"20140108" AND S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 16:01
S100	34	(DRIV$3 ADJ KEY) and @ad<"20140108" AND DRM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 16:02
S101	3461	(from near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:05
S102	0	((key license token certificate) adj from near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:06
S103	14	((key license token certificate) near2 from near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:07
S104	2	(from near2 (content video image media stream file document information	US-PGPUB; USPAT;	OR	ON	2017/06/29 07:10

		message text)) and @ad<"20140108" and ("digital right management" DRM "content protected" "content protection")	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S105	686	(from adj (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S106	5829	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S107	1844	S106 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S108	0	(from adj (content video image media stream file document information message text)) and @ad<"20140108" and S107	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S109	246160	((key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:15
S110	291	((key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108" and S107	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:15
S111	38569	((driv$3 generat$4 creat$4 found comput$4 obtain$4 get$4) near2 (key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:17
S112	92	((driv$3 generat$4 creat$4 found comput$4 obtain$4 get$4) near2 (key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108" and S107	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:18

S113	28	"2993604"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:20
S114	50	"617189"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:21
S115	2	"617189p"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:22
S116	3	"20070220610"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:22
S117	14	("20020013772" | "20020038348" | "20020157002" | "20030076955" | "20030196099" | "20040017916" | "20040093523" | "20040107368" | "20050050345" | "20050071663" | "20050102513" | "20050265555" | "6728379" | "7305087").PN. OR ("8875299").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/06/29 09:23
S118	0	("content key").ti. and @ad<"20140108" and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:01
S119	555	("content key").ti. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:01
S120	54	("content key").ti. and @ad<"20140108" and drm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:01
S121	44	(key adj from) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2017/06/29 10:14

			EPO; JPO; DERWENT; IBM_TDB			
S122	4	"20130073466"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:24
S123	188	drive near3 key near3 content	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:30
S124	180	(drive near3 key near3 content) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:30
S125	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:51
S126	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:13
S127	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:13
S128	8	obtain$3 near3 "digital rights management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:14
S129	3	obtain$3 near5 "digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:14
S130	10	"20100114730"	US-PGPUB; USPAT;	OR	ON	2017/06/29 11:17

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S131	1	10/099931	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:36
S132	1	11/254315	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:43
S133	1	11/255692	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:55
S134	1	11/159754	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:58
S135	1	12/425490	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:04
S136	5	"8290427"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:10
S137	4	12/265732	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:11
S138	1	13/333894	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:15

EAST Search History (Interference)

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6/ 29/ 2017 2:25:57 PM
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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14591952	VALJAKKA ET AL.
	Examiner	Art Unit
	YONAS BAYOU	2434

CPC- SEARCHED		
Symbol	Date	Examiner
G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102	9/15/2016	

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102	9/15/2016	yb
East Search (such as Inventor's and Assignee's Name Search, CPC, Keywords), Inventor Search and Reviewed related Cases.	9/15/2016	yb

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14591952	VALJAKKA ET AL.
	Examiner	**Art Unit**
	YONAS BAYOU	2434

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	06/14/2016	09/15/2016	06/29/2017						
	1	÷	N	-						
	2	÷	N	-						
	3	÷	N	-						
	4	÷	N	-						
	5	÷	N	-						
	6	÷	✓	✓						
	7	÷	✓	✓						
	8	÷	✓	✓						
	9	÷	✓	✓						

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 1

Complete if Known	
Application Number	14/591,952
Filing Date	January 08, 2015
First Named Inventor	VALJAKKA, Lauri
Art Unit	2434
Examiner Name	BAYOU, Yonas A
Attorney Docket Number	SCIH 2 US

U.S. PATENT DOCUMENTS

Examiner initial *	Cite No.	Document Number Number - Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US-2014059156 - A1	02-27-2014	FREEMAN J. R. II et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initial *	Cite No. 1	Foreign Patent Document Country[3] Code Number[4] Kind Code (if known)[5]	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	2	EP 1189432 - A2	03-20-2002	MATSUSHITA ELECTRIC IND (		

Examiner Signature	/YONAS A BAYOU/	Date Considered	06/29/2017

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not Considered. Include copy of this form with next communication to applicant. 1. Applicant's unique citation design number (optional). 2 See Kinds Codes of USPTO patent Documents. at www.uspto.gov or MPEP 901.04. 3. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4. For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.
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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /Y.A.B/

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REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	14/591,952	Filing Date	2015-01-08	Docket Number (if applicable)	SCIH 2 US	Art Unit	2434
First Named Inventor	VALJAKKA, Lauri			Examiner Name	BAYOU, Yonas A.		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, to any international application that does not comply with the requirements of 35 U.S.C. 371, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV.

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☒ Amendment/Reply
- ☐ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☒ Other Petition for Extension of Time Under 37 CFR 1.136(a)

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____ (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

☐ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No _____

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

Applicant Signature

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Signature of Registered U.S. Patent Practitioner			
Signature	/Toimi Teelahti Reg. No. 76127/	Date (YYYY-MM-DD)	2017-11-07
Name	Toimi Teelahti	Registration Number	76127

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

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5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

REMARKS/ARGUMENTS

Claims 6–9 are pending. Claims 6–9 have been amended herein to address objections raised by the Examiner and to specify how the operation of "deriving information describing encryption properties of the access restricted content using the first DRM key" is performed, supported by the specification at least on page 16, lines 14-24. ***No new matter has been added.***

Regarding Claim Objections

The Examiner has objected to claims 7 and 8 as containing informalities. The claims have been amended herein to correct the errors.

Regarding Rejections under 35 U.S.C. § 103

The Examiner rejects claims 6 –9 under 35 U.S.C. § 103 as being obvious in view US Patent Publication 2013/0268771 ('Blankenbeckler') in view of US Patent Publication 2012/0308008 ('Kondareddy'). The Applicant traverses the rejection for at least the reason that the combination of Blankenbeckler and Kondareddy does not disclose each and every element of the claims.

Claim 6, as amended, includes the limitation of *using the first digital rights management key to obtain a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key.*

Regarding Blankenbeckler

Blankenbeckler appears to discuss a DRM system. The Examiner relies on Blankenbeckler to teach the majority of the limitations of the claims, with the exception of deriving information describing encryption properties of the access restricted content using the first digital rights management key. In regards to the amended claim 6, Blankenbeckler does not appear to disclose the above-mentioned limitation. Nor does it appear to suggest such a limitation.

Regarding Kondareddy

Kondareddy appears to disclose a system for wireless transmission of protected content. The Examiner relies upon Kondareddy to disclose deriving information describing the encryption properties of the access restricted content using the first DRM key. However, Kondareddy does not appear to disclose *using the first digital rights management key to obtain a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key*. Nor does Kondareddy appear to teach that limitation.

As discussed above, neither Balakrishnan nor Kondareddy appear to disclose or fairly teach the limitation of *using the first digital rights management key to obtain a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key*. Nor does the cited prior art appear to teach the remainder of the added limitations, including validating the obtained fingerprint. Therefore, claim 6 is patentable over Balakrishnan and Kondareddy for at least the reason that the cited prior art does not disclose or fairly teach each and every limitation of the claim.

Regarding claims 7, 8 and 9

Independent claim 9 recites similar limitations to claim 6, as stated above, and is therefore patentable for at least the reasons stated above in regards to claim 6.

Regarding dependent claims

The remaining claims in the application are dependent on the independent claims discussed above (claim 6) and as such incorporate the limitations discussed above. Therefore, the dependent claims are also patentable over Balakrishnan and Kondareddy for at least the reasons stated above.

Reconsideration and withdrawal of the present rejections is respectfully requested.

CONCLUSION

The Applicant believes that that present application is in condition for allowance. Notice of the same is earnestly solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Toimi Teelahti, Reg. No. 76127 at (571) 335-7960, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Respectfully submitted,

/ Toimi T. Teelahti Reg. No. 76127/

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2017-11-07

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1 – 5. (Canceled)

6. (Currently Amended) An apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to:
   - obtain an access restricted content from at least one of a content database and a content providing server;
   - obtain a first digital rights management key from the content database;
   - ~~derive information describing encryption properties of the access restricted content from the access restricted content~~ using the first digital rights management key, obtain a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key, ~~and~~
   - cause the content providing server to validate the fingerprint, and, if the validation is successful, access the access restricted content and
   - derive a second digital rights management key from the access restricted content~~,~~ using the ~~information describing encryption properties~~digital rights management header of the access restricted content.

7. (Currently Amended) ~~An~~ The apparatus according to claim 6, wherein the second digital rights management key is at least in part operable to obtain ~~the~~ a content payload from the access restricted content.

8. (Currently Amended) ~~An~~ The apparatus according to claim 6, wherein the apparatus is caused to obtain the first digital rights management key either by receiving it from a server or by generating it at least in part from at least one of environmental parameters and parameters of the access restricted content.

9. (Currently Amended) A method, comprising:
   - obtaining an access restricted content from at least one of a content database and a content providing server;
   - obtaining a first digital rights management key from a content database;
   - deriving, using the first digital rights management key, from the access restricted content a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key,
   - causing the content providing server to validate the fingerprint, and if the validation is successful, accessing the access restricted content and
   - ~~information describing encryption properties of the access restricted content~~, and
   - deriving, using the ~~information describing encryption properties~~digital rights management header of the access restricted content, from the access restricted content a second digital rights management key.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	: 14/591,952	Confirmation No. : 5164
First Named Inventor	: Lauri Valjakka	
Filing Date	: 01/08/2015	
TC/AU	: 2434	
Examiner	: Bayou, Yonas A	

Attorney Docket No. : SCIH 2 US

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO FINAL OFFICE ACTION AND REQUEST FOR CONTINUED EXAMINATION

INTRODUCTORY COMMENTS

In response to the Final Office Action dated July 7, 2017, a Request for Continued Examination under 37 CFR § 1.114 is herewith filed. Please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 4 of this paper.

PTO/AIA/22 (03-13)
Approved for use through 7/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)

Docket Number (Optional): SCIH 2 US

Application Number: 14/591,952

Filed: 2015-01-08

For: A method of and system for providing access to access restricted content to a user

Art Unit: 2434

Examiner: BAYOU, Yonas A.

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	Fee	Small Entity Fee	Micro Entity Fee	
☑ One month (37 CFR 1.17(a)(1))	$200	$100	$50	$ 100
☐ Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$
☐ Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$
☐ Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
☐ Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

☑ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☐ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number _____.

☑ Payment made via EFS-Web.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant.

☑ attorney or agent of record. Registration number 76127.

☐ attorney or agent acting under 37 CFR 1.34. Registration number _____.

/Toimi Teelahti Reg. No. 76127/ — Signature

2017-11-07 — Date

Toimi Teelahti — Typed or printed name

(571) 335-7960 — Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☑ * Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	14591952
Filing Date:	08-Jan-2015
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Filer:	Matthew Alan Swanson/Ross Worrell
Attorney Docket Number:	SCIH 2 US

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 1 month with $0 paid	2251	1	100	100
Miscellaneous:				
RCE- 2ND AND SUBSEQUENT REQUEST	2820	1	850	850
		Total in USD ($)		**950**

Electronic Acknowledgement Receipt

EFS ID:	30871603
Application Number:	14591952
International Application Number:	
Confirmation Number:	5164
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Customer Number:	95002
Filer:	Matthew Alan Swanson/Ross Worrell
Filer Authorized By:	Matthew Alan Swanson
Attorney Docket Number:	SCIH 2 US
Receipt Date:	07-NOV-2017
Filing Date:	08-JAN-2015
Time Stamp:	08:43:35
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$950
RAM confirmation Number	110717INTEFSW08443500
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	SCIH2US_2017-11-07_SB0030EFS_RCE_transmittal.pdf	1350099 976eeccac0d510756838bd43a12d9c2dde316d60	no	3
Warnings:					
Information:					
2		SCIH2US_2017-11-07_RCE.pdf	145356 fcac2a08238393dfef6d6b04b4db6707b60ed78c	yes	6

Multipart Description/PDF files in .zip description

Document Description	Start	End
Applicant Arguments/Remarks Made in an Amendment	4	6
Claims	2	3
Amendment Submitted/Entered with Filing of CPA/RCE	1	1

Warnings:					
Information:					
3	Extension of Time	SCIH2US_2017-11-07_AIA0022_Extension.pdf	163814 1af4efe692d32401dbe9193654706c4e043ea8af	no	2
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	32528 bfce73ca7e38811367da3031252bc44478f92dd7	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1691797		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/591,952	Filing Date 01/08/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT **11/17/2017**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 4	Minus	** 20	= 0	X $0 =	0
Independent (37 CFR 1.16(h))	* 2	Minus	***4	= 0	X $0 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	0

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
BRENDA J. DENNY

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/591,952	01/08/2015	Lauri Valjakka	SCIH 2 US	5164

95002 7590 12/11/2017

Seppo Laine Oy
Itamerenkatu 3 A
Helsinki, FI00180
FINLAND

EXAMINER
BAYOU, YONAS A

ART UNIT	PAPER NUMBER
2434	

NOTIFICATION DATE	DELIVERY MODE
12/11/2017	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

posti@seppolaine.fi
matthew.swanson@seppolaine.fi
toimi.teelahti@seppolaine.fi

Office Action Summary	Application No. 14/591,952	Applicant(s) VALJAKKA ET AL.	
	Examiner YONAS BAYOU	Art Unit 2434	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11/07/2017*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *6-9* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *6-9* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *01/08/2015* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☒ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to Applicant's Arguments /Remarks and RCE filed on 11/07/2017.

2. As per instant Amendment, Claims 1-5 were canceled; Claims 6-9 have been amended; Claims 6 and 9 are independent claims. Claims 6-9 have been examined and are pending. **This Action is made Non-FINAL**.

Notice of Pre-AIA or AIA Status

3. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/07/2017 has been entered.

Response to Arguments

5. Examiner withdraws claim objections to claims 7 and 8 as applicant amends the claims.

6. Applicants' arguments in the instant Amendment, filed on 11/07/2017, with respect to limitations listed below, have been fully considered but they are not persuasive.

Applicant's arguments: *"Blankenbeckler nor Kondareddy appear to* disclose '*using the first digital rights management key to obtain a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key*'."

The Examiner disagrees with the Applicants. The Examiner respectfully submits that Blankenbeckler discloses '*using the first digital rights management key to obtain a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key*' *(abstract, DRM employs keys those keys are considered as a fingerprint (a unique access key) of the access of the restricted content; paras. 0012-0015, 0092 and fig. 7).*

7. New rejections necessitated by the applicant amendments.

Claim Rejections - 35 USC § 102

8. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

10. **Claims 6-9 are rejected under 35 U.S.C. 102(a) (2)** as being anticipated by Blankenbeckler et al (hereinafter Blankenbeckler), Pub. No.: US 2013/0268771.

Referring to claim 6, Blankenbeckler teaches an apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to:

obtain an access restricted content from at least one of a content database and a content providing server *(para. 0038 and fig. 3, content database 302);*

obtain a first digital rights management key from the content database *(paras. 0013, 0038 and fig. 3, content database stores digital certificates/DRM key);*

using the first digital rights management key, obtain a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key *(abstract, DRM employs keys those keys are considered as a fingerprint (a unique access key) of the access of the restricted content; paras. 0012-0015, 0092 and fig. 7)*;

cause the content providing server to validate the fingerprint, and, if the validation is successful, access the access restricted content *(abstract, paras. 0012-0015)* and

derive a second digital rights management key from the access restricted content; using the digital rights management header of the access restricted content *(para. 0101 and figs. 4-5, content key 700 (the claimed 'a second digital rights management key') may be retrieved from the content metadata).*

Referring to claim 7, Blankenbeckler further teaches wherein the second digital rights management key is at least in part operable to obtain a content payload from the access restricted content key *(abstract and paras. 0012-0015).*

Referring to claim 8, Blankenbeckler further teaches wherein the apparatus is caused to obtain the first digital rights management key either by receiving it from a server or by generating it at least in part from at least one of environmental parameters and parameters of the access restricted content *(paras. 0013, 0038, 0101 and figs. 3-5).*

Referring to claim 9, This claim is similar in scope to claim 6, and is therefore rejected under similar rationale.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YONAS BAYOU whose telephone number is (571)272-7610. The examiner can normally be reached on m-f,7:30-5:00.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571-272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YONAS BAYOU/
Primary Examiner, Art Unit 2434
12/01/2017

Notice of References Cited	Application/Control No. 14/591,952	Applicant(s)/Patent Under Reexamination VALJAKKA ET AL.	
	Examiner YONAS BAYOU	Art Unit 2434	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2013/0268771 A1	10-2013	BLANKENBECKLER; David L.	H04L9/0866	713/189
	B	US-				
	C	US-				
	D	US-				
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14591952	VALJAKKA ET AL.
	Examiner	**Art Unit**
	YONAS BAYOU	2434

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	06/14/2016	09/15/2016	06/29/2017	12/01/2017					
	1	÷	N	-	-					
	2	÷	N	-	-					
	3	÷	N	-	-					
	4	÷	N	-	-					
	5	÷	N	-	-					
	6	÷	✓	✓	✓					
	7	÷	✓	✓	✓					
	8	÷	✓	✓	✓					
	9	÷	✓	✓	✓					

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	19	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20130268771" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 13:33
S1	1	14/591952	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:42
S2	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:43
S3	367	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:45
S4	10086	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in. (access$3 with restri$4).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:46
S5	1	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in. and (access$3 with restri$4).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:46
S6	1	"SC Intelligent Holding"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:49
S7	2563	(access$3 near3 (restricted adj (content	US-PGPUB;	OR	ON	2016/06/14

		file document information resource packet video game application app)))	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			15:55
S8	2255	(access$3 near3 (restricted adj (content file document information resource packet video game application app))) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:56
S9	127	(access$3 near3 (restricted adj (content file document information resource packet video game application app))) and @ad<"20140108" and (G06F21/10).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:56
S10	5576	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:57
S11	1668	S10 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:58
S12	3	S10 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.) AND S9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:58
S13	113	(access$3 WITH (restricted adj (content file document information resource packet video game application app))).TI. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:59
S14	1	(access$3 WITH (restricted adj (content file document information resource packet video game application app))).TI. and @ad<"20140108" AND S11	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:59
S15	1	"digital rights management keys" with "access restricted content"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2016/09/15 10:54

			IBM_TDB			
S16	2	"digital rights management" with "access restricted content"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 10:56
S17	3	10/265437	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 11:11
S18	16	("5191573" | "5629980" | "5734823" | "5734891" | "5892900" | "5907288" | "5940591" | "6134662" | "6185683" | "6212633" | "6253193" | "6327660" | "6891953" | "6970849").PN. OR ("7865964").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/09/15 11:12
S19	161	"digital rights management keys"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S20	5672	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S21	1744	S20 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S22	0	"digital rights management keys" and S21	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S23	132	"digital rights management keys" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S24	6	"digital rights management keys" and @ad<"20140108" and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2016/09/15 12:09

			DERWENT; IBM_TDB			
S25	17	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 17:03
S26	4	"8495167"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 18:04
S27	1	13/723283	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 18:05
S28	0	15/199481	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/16 15:19
S29	2	14/526360	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/16 15:19
S30	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 11:46
S31	5	"second digital rights management key" and "first digital rights management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:30
S32	4	"second digital rights management key" and "first digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:31
S33	76	"second digital rights management" and "first digital rights management" and @ad<"20140108"	US-PGPUB; USPAT; USOCR;	OR	ON	2017/04/05 14:33

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S34	5753	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:34
S35	1819	S34 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:34
S36	0	"second digital rights management" and "first digital rights management" and @ad<"20140108" and S35	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:34
S37	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/26 14:42
S38	5	"20140059156"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/26 14:50
S39	38	("20020069132" | "20040252967" | "20060062363" | "20060069749" | "20070179854" | "20080095370" | "20080119132" | "20080270579" | "20080310815" | "20090254971" | "20090288112" | "20090288131" | "20100138865" | "20100169502" | "20100251305" | "20110047134" | "20110093900" | "20110103374" | "20110177773" | "20110197236" | "20110202383" | "20120042050" | "20120252352" | "20130031211" | "6016520" | "6571279" | "6671424" | "6766376" | "7403618" | "7565399" | "7630986" | "7941092" | "8078096" | "8180276" | "8385813" | "8489673" | "8745158" | "8898708").PN. OR ("9215269").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/06/26 14:50
S40	60	"1189432"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2017/06/26 14:52

			DERWENT; IBM_TDB			
S41	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:15
S42	5829	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:37
S50	5	"second Digital right management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:39
S51	4	"second Digital right management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:39
S54	3	"second drm key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:44
S55	241	((creat$4 driv$4 generat$4) near3 (drm adj (license key))) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:57
S56	1844	S42 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:58
S57	2	((creat$4 driv$4 generat$4) near3 (drm adj (license key))) and @ad<"20140108" and S56	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:58
S58	85	((creat$4 driv$4 generat$4) near3 ((drm adj (license key "second key")) key "second key") near3 (content	US-PGPUB; USPAT; USOCR;	OR	ON	2017/06/27 14:06

		information file document)) and @ad<"20140108" and S56	FPRS; EPO; JPO; DERWENT; IBM_TDB			
S60	7	from adj content	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 14:27
S66	5480	(DRM "DIGITAL RIGHT MANAGEMENT").ti. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 14:51
S70	81	(DRM "DIGITAL RIGHT MANAGEMENT").ti. and @ad<"20140108" AND ((creat$4 driv$4 generat$4 COMPUT$4) near3 (drm adj (license key)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 14:53
S73	6	"20080109368"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:46
S74	4	"first digital rights management key" and "second digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:50
S75	0	"first DRM key" and "second DRM key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:51
S76	397	"first DRM" and "second DRM" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:58
S77	0	"first DRM" and "second DRM" and @ad<"20140108" and S56	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:58
S78	7	"20150110035"	US-PGPUB;	OR	ON	2017/06/28

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			13:28
S79	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:33
S80	1196	("content protection key" "digital rights management key" "DRM key")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S81	5829	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S82	1844	S81 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S83	0	("content protection key" "digital rights management key" "DRM key") and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S84	988	("content protection key" "digital rights management key" "DRM key") and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:36
S85	107	("content protection key" "digital rights management key" "DRM key") and @ad<"20140108" and ("digital rights management").ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:36
S86	15	("content protection key" "digital rights management key" "DRM key") and @ad<"20140108" and ("digital rights management").ti. and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2017/06/28 13:37

			IBM_TDB			
S87	15	(("content protection key" "digital rights management key" "DRM key") near3 database) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:47
S88	106	(("content protection key" "digital rights management key" "DRM key" license) near5 "content database") and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:31
S89	3	"20110314488"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:33
S90	1841	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:58
S91	0	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and (acces$4 with contol$4 with right).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:59
S92	0	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and (acces$4 with contol$4).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:59
S93	0	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:59
S94	68	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and "digital rights management"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 15:00
S95	6	(driv$3 near5 key near5 (file content image video movie information document media)) and @ad<"20140108" and S82	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2017/06/28 15:45

			EPO; JPO; DERWENT; IBM_TDB			
S96	152	((generat$4 comput$4 creat$4 driv$3) near5 key near5 (file content image video movie information document media)) and @ad<"20140108" and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 15:46
S97	27	((generat$4 comput$4 creat$4 driv$3) near5 key near5 (file content image video movie information document media)) and @ad<"20140108" and S82 and DRM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 15:47
S98	3347	(DRIVE ADJ KEY) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 16:00
S99	1	(DRIVE ADJ KEY) and @ad<"20140108" AND S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 16:01
S100	34	(DRIV$3 ADJ KEY) and @ad<"20140108" AND DRM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 16:02
S101	3461	(from near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:05
S102	0	((key license token certificate) adj from near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:06
S103	14	((key license token certificate) near2 from near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:07
S104	2	(from near2 (content video image media stream file document information	US-PGPUB; USPAT;	OR	ON	2017/06/29 07:10

		message text)) and @ad<"20140108" and ("digital right management" DRM "content protected" "content protection")	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S105	686	(from adj (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S106	5829	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S107	1844	S106 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S108	0	(from adj (content video image media stream file document information message text)) and @ad<"20140108" and S107	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S109	246160	((key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:15
S110	291	((key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108" and S107	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:15
S111	38569	((driv$3 generat$4 creat$4 found comput$4 obtain$4 get$4) near2 (key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:17
S112	92	((driv$3 generat$4 creat$4 found comput$4 obtain$4 get$4) near2 (key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108" and S107	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:18

S113	28	"2993604"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:20
S114	50	"617189"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:21
S115	2	"617189p"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:22
S116	3	"20070220610"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:22
S117	14	("20020013772" | "20020038348" | "20020157002" | "20030076955" | "20030196099" | "20040017916" | "20040093523" | "20040107368" | "20050050345" | "20050071663" | "20050102513" | "20050265555" | "6728379" | "7305087").PN. OR ("8875299").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/06/29 09:23
S118	0	("content key").ti. and @ad<"20140108" and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:01
S119	555	("content key").ti. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:01
S120	54	("content key").ti. and @ad<"20140108" and drm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:01
S121	44	(key adj from) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2017/06/29 10:14

			EPO; JPO; DERWENT; IBM_TDB			
S122	4	"20130073466"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:24
S123	188	drive near3 key near3 content	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:30
S124	180	(drive near3 key near3 content) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:30
S125	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:51
S126	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:13
S127	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:13
S128	8	obtain$3 near3 "digital rights management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:14
S129	3	obtain$3 near5 "digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:14
S130	10	"20100114730"	US-PGPUB; USPAT;	OR	ON	2017/06/29 11:17

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S131	1	10/099931	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:36
S132	1	11/254315	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:43
S133	1	11/255692	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:55
S134	1	11/159754	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:58
S135	1	12/425490	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:04
S136	5	"8290427"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:10
S137	4	12/265732	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:11
S138	1	13/333894	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:15

S139	19	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20130268771" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 14:25
S140	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:20
S141	17	("20040030650" | "20080263356" | "20090052671" | "20120066754" | "20120303974" | "6205550" | "6609199" | "6832319" | "7024393" | "7155616" | "7215771" | "7356143" | "7467304" | "7594275" | "7925894").PN. OR ("8831217").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/12/01 11:20
S142	40	"2013/0268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:21
S143	0	2012/0308008	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:21
S144	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:22

EAST Search History (Interference)

<This search history is empty>

12/ 1/ 2017 2:00:22 PM
C:\ Users\ ybayou\ Documents\ EAST\ Workspaces\ 14591952.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14591952	VALJAKKA ET AL.
	Examiner	Art Unit
	YONAS BAYOU	2434

CPC- SEARCHED		
Symbol	Date	Examiner
G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102	9/15/2016	

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

SEARCH NOTES		
Search Notes	Date	Examiner
G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102	9/15/2016	yb
East Search (such as Inventor's and Assignee's Name Search, CPC, Keywords), Inventor Search and Reviewed related Cases.	9/15/2016	yb
Search is updated	12/1/2017	yb

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

	/YONAS BAYOU/ Primary Examiner.Art Unit 2434

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 14/591,952 Confirmation No. : 5164
First Named Inventor : Lauri Valjakka
Filing Date : 01/08/2015
TC/AU : 2434
Examiner : Bayou, Yonas A

Attorney Docket No. : SCIH 2 US

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO NON-FINAL OFFICE ACTION

INTRODUCTORY COMMENTS

In response to the Non-Final Office Action dated December 11, 2017, please amend the above-identified application as follows:

Request for Interview is submitted on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks/Arguments begin on page 6 of this paper.

REQUEST FOR INTERVIEW UNDER 37 CFR § 1.133

The Examiner is respectfully requested to contact Applicant's representative, Toimi Teelahti, Reg. No. 76127 at (571) 335-7960, in order to schedule an interview to discuss the patentability of the present application before an Office Action is issued in response to the present amendment should the next Office Action be other than a Notice of Allowance.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1 – 5. (Canceled)

6. (Currently Amended) An apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to:
   - obtain an access restricted content from at least one of a content database and a content providing server;
   - obtain a first digital rights management key from the content database, wherein the obtaining is based at least in part on a query, the query comprising the content identifier and an identifier associated with the user;
   - using the first digital rights management key, obtain a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key,
   - cause the content providing server to validate the fingerprint, and, if the validation is successful, access the access restricted content and
   - derive a second digital rights management key from the access restricted content using the digital rights management header of the access restricted content.

7. (Previously Presented) The apparatus according to claim 6, wherein the second digital rights management key is at least in part operable to obtain a content payload from the access restricted content.

8. (Previously Presented) The apparatus according to claim 6, wherein the apparatus is caused to obtain the first digital rights management key either by receiving it from a server or by generating it at least in part from at least one of environmental parameters and parameters of the access restricted content.

9. (Currently Amended) A method, comprising:
   - obtaining an access restricted content from at least one of a content database and a content providing server;
   - obtaining a first digital rights management key from a content database, wherein the obtaining is based at least in part on a query, the query comprising the content identifier and an identifier associated with the user;
   - deriving, using the first digital rights management key, from the access restricted content a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key,
   - causing the content providing server to validate the fingerprint, and, if the validation is successful, accessing the access restricted content and
   - information describing encryption properties of the access restricted content, and
   - deriving, using the digital rights management header of the access restricted content, from the access restricted content a second digital rights management key.

10. (New). The apparatus of claim 6, wherein the first digital rights management key is unique to a specific session.

11. (New) The apparatus of claim 6, wherein the access restricted content comprises a first layer that is decryptable using the first digital rights management key, the first layer comprising information on which key may be used to obtain fuller access to the access restricted content.

12. (New) The method of claim 9, wherein the first digital rights management key is unique to a specific session.

REMARKS/ARGUMENTS

Claims 6–12 are pending. Claims 6 and 9 have been amended herein, supported by the specification at least on page 6, lines 5-17. Claims 10-12 have been added, supported by the specification at least on page 14, lines 6-9 (claims 10 and 12) and page 19 lines 7-15 (claim 11). ***No new matter has been added.***

Regarding interview request

This paper has been filed along with a *conditional* request for interview under 37 CFR § 1.133. The Examiner is respectfully requested to contact Applicant's representative in order to schedule an interview to discuss the patentability of the present application before an Office Action is issued in response to the present amendment, should the next Office Action be other than a Notice of Allowance.

Regarding Rejections under 35 U.S.C. § 102

The Examiner rejects claims 6 – 9 under 35 U.S.C. § 102 as being anticipated by US Patent Publication 2013/0268771 ('Blankenbeckler'). The Applicant traverses the rejection for at least the reason that Blankenbeckler does not disclose each and every element of the claims.

Claim 6, as amended, recites the limitation of *obtaining a first digital rights management key from the content database, wherein the obtaining is based at least in part on a query, the query comprising the content identifier and an identifier associated with the user*. Blankenbeckler does not appear to disclose wherein such a query comprises an identifier associated with the user. Therefore, claim 6 is patentable over Blankenbeckler for at least the reason that Blankenbeckler fails to disclose each and every limitation of the claim.

Regarding claim 9

Independent claim 9 recites a similar limitation to claim 6, as discussed above, and is therefore patentable for at least the reasons stated above in regards to claim 6.

Regarding dependent claims

The remaining claims in the application are dependent on the independent claims discussed above and as such incorporate the limitations discussed above. Therefore, the dependent claims are also patentable over Blankenbeckler for at least the reasons stated above.

Reconsideration and withdrawal of the present rejections is respectfully requested.

CONCLUSION

The Applicant believes that that present application is in condition for allowance. Notice of the same is earnestly solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Toimi Teelahti, Reg. No. 76127 at (571) 335-7960, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Respectfully submitted,

/ Toimi T. Teelahti Reg. No. 76127/

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2018-06-11

PTO/AIA/22 (03-13)
Approved for use through 7/31/2016. OMB 0651-0031
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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)

Docket Number (Optional): SCIH 2 US

Application Number: 14/591,952

Filed: 2015-01-08

For: A method of and system for providing access to access restricted content to a user

Art Unit: 2434

Examiner: BAYOU, Yonas A.

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

		Fee	Small Entity Fee	Micro Entity Fee	
☐	One month (37 CFR 1.17(a)(1))	$200	$100	$50	$
☐	Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$
☑	Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$ 700
☐	Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
☐	Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

☑ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☐ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number _____.

☑ Payment made via EFS-Web.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant.

☑ attorney or agent of record. Registration number 76127.

☐ attorney or agent acting under 37 CFR 1.34. Registration number _____.

/Toimi Teelahti Reg. No. 76127/ — Signature

2018-06-11 — Date

Toimi Teelahti — Typed or printed name

(571) 335-7960 — Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☑ * Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	14591952
Filing Date:	08-Jan-2015
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Filer:	Matthew Alan Swanson/Ross Worrell
Attorney Docket Number:	SCIH 2 US

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 3 months with $0 paid	2253	1	700	700
Miscellaneous:				
			Total in USD ($)	**700**

Electronic Acknowledgement Receipt

EFS ID:	32854454
Application Number:	14591952
International Application Number:	
Confirmation Number:	5164
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Customer Number:	95002
Filer:	Matthew Alan Swanson/Ross Worrell
Filer Authorized By:	Matthew Alan Swanson
Attorney Docket Number:	SCIH 2 US
Receipt Date:	11-JUN-2018
Filing Date:	08-JAN-2015
Time Stamp:	09:15:59
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$700
RAM confirmation Number	061118INTEFSW09164800
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		SCIH2US_2018-06-11_Amendment.pdf	147904 26c4b23ccad816d4bf406d7f23e697f228fab1d8	yes	7
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
	Letter Requesting Interview with Examiner		2	2	
	Claims		3	5	
	Applicant Arguments/Remarks Made in an Amendment		6	7	
Warnings:					
Information:					
2	Extension of Time	SCIH2US_2018-06-11_AIA0022_Extension.pdf	163579 47ad714b768748a157a31fe1313d02a80dc88c0a	no	2
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30614 ce89a5186c17ef2c25835cd94f9fd396e7710f2b	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	342097		

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If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

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95002 e 2018-06-29
Seppo Laine Oy
Itamerenkatu 3 A
Helsinki, FI00180 FINLAND

Paper No. 20180627

Application No.:	14/591,952	**Date Mailed:**	2018-06-29 ELECTRONIC
First Named Inventor:	Lauri Valjakka	Examiner:	BAYOU, YONAS A
Attorney Docket No.:	SCIH 2 US	Art Unit:	2434
Confirmation No.:	5164	Filing Date:	01/08/2015

Please find attached an Office communication concerning this application or proceeding.

Commissioner for Patents

PTO-90c (Rev.08-06)

Notice of Non-Compliant Amendment (37 CFR 1.121)	Application No. 14/591,952	Applicant(s) Valjakka et al.
	Art Unit OTOR	AIA Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

The amendment document filed on 11 June 2018 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121 or 1.4. In order for the amendment document to be compliant, correction of the following item(s) is required.

THE FOLLOWING MARKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☐ 1. Amendments to the specification:
  - ☐ A. Amended paragraph(s) do not include markings.
  - ☐ B. New paragraph(s) should not be underlined.
  - ☐ C. Other _____ .
- ☐ 2. Abstract:
  - ☐ A.Not presented on a separate sheet. 37 CFR 1.72.
  - ☐ B.Other _____ .
- ☐ 3. Amendments to the drawings:
  - ☐ A. The drawings are not properly identified in the top margin as "Replacement Sheet", "New Sheet", or "Annotated Sheet" as required by 37 CFR 1.121(d).
  - ☐ B. The practice of submitting proposed drawing correction has been eliminated. Replacement drawings showing amended figures, without markings, in compliance with 37 CFR 1.84 are required.
  - ☐ C. Other _____ .
- ☑ 4. Amendments to the claims:
  - ☐ A. A complete listing of all of the claims is not present.
  - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
  - ☐ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following status identifiers: (Original), (Currently amended), (Canceled), (Previously presented), (New), (Not entered), (Withdrawn) and (Withdrawn-currently amended).
  - ☐ D. The claims of this amendment paper have not been presented in ascending numerical order.
  - ☑ E. Other: Claims 10-12 are improper because of the underlined .
- ☐ 5. Other (e.g., the amendment is unsigned or not signed in accordance with 37 CFR 1.4): For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714.

TIME PERIODS FOR FILING A REPLY TO THIS NOTICE:

1. Applicant is given **no new time period** if the non-compliant amendment is an after-final amendment or an amendment filed after allowance, or a drawing submission (only) If applicant wishes to resubmit the non-compliant after-final amendment with corrections, the **entire corrected amendment** must be resubmitted.

2. Applicant is given **two months** from the mail date of this notice to supply the correction, if the non-compliant amendment is one of the following: a preliminary amendment, a non-final amendment (including a submission for a request for continued examination (RCE) under 37 CFR 1.114), a supplemental amendment filed within a suspension period under 37 CFR 1.103(a) or (c), and an amendment filed in response to a Quayle action. If any of above boxes 1 to 4 are checked, the correction required is only the corrected section of the non-compliant amendment in compliance with 37 CFR 1.121.

Extensions of time are available under 37 CFR 1.136(a) only if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action.

Failure to timely respond to this notice will result in:

Abandonment of the application if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action; or

Non-entry of the amendment if the non-compliant amendment is a preliminary amendment or supplemental amendment.

Legal Instruments Examiner (LIE), if applicable /TERRY BRYANT/ Telephone No: (571)272-1028

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/591,952	Filing Date 01/08/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☑ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $40 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $210 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT	06/11/2018	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 7	Minus	** 20	= 0		x $50 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	*** 3	= 0		x $230 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	0

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $ 0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $ 0 =	
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.	LIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	TERRY BRYANT
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 14/591,952 Confirmation No. : 5164
First Named Inventor : Lauri Valjakka
Filing Date : 01/08/2015
TC/AU : 2434
Examiner : Bayou, Yonas A

Attorney Docket No. : SCIH 2 US

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO NON-FINAL OFFICE ACTION

INTRODUCTORY COMMENTS

In response to the Notice of Non-Compliant Amendment (37 CFR 1.121) dated June 29, 2018, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 5 of this paper.

Note that only the corrected section of the non-compliant amendment dated June 11, 2018 is being filed herein in compliance with 37 CFR 1.121.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1 – 5. (Canceled)

6. (Currently Amended) An apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to:
   - obtain an access restricted content from at least one of a content database and a content providing server;
   - obtain a first digital rights management key from the content database, wherein the obtaining is based at least in part on a query, the query comprising the content identifier and an identifier associated with the user;
   - using the first digital rights management key, obtain a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key,
   - cause the content providing server to validate the fingerprint, and, if the validation is successful, access the access restricted content and
   - derive a second digital rights management key from the access restricted content using the digital rights management header of the access restricted content.

7. (Previously Presented) The apparatus according to claim 6, wherein the second digital rights management key is at least in part operable to obtain a content payload from the access restricted content.

8. (Previously Presented) The apparatus according to claim 6, wherein the apparatus is caused to obtain the first digital rights management key either by receiving it from a server or by generating it at least in part from at least one of environmental parameters and parameters of the access restricted content.

9. (Currently Amended) A method, comprising:
   - obtaining an access restricted content from at least one of a content database and a content providing server;
   - obtaining a first digital rights management key from a content database, wherein the obtaining is based at least in part on a query, the query comprising the content identifier and an identifier associated with the user;
   - deriving, using the first digital rights management key, from the access restricted content a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key,
   - causing the content providing server to validate the fingerprint, and, if the validation is successful, accessing the access restricted content and
   - information describing encryption properties of the access restricted content, and
   - deriving, using the digital rights management header of the access restricted content, from the access restricted content a second digital rights management key.

10. (New). The apparatus of claim 6, wherein the first digital rights management key is unique to a specific session.

11. (New) The apparatus of claim 6, wherein the access restricted content comprises a first layer that is decryptable using the first digital rights management key, the first layer comprising information on which key may be used to obtain fuller access to the access restricted content.

12. (New) The method of claim 9, wherein the first digital rights management key is unique to a specific session.

CONCLUSION

The Applicant believes that that present application is in condition for allowance. Notice of the same is earnestly solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Toimi Teelahti, Reg. No. 76127 at (571) 335-7960, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Respectfully submitted,

/ Toimi T. Teelahti Reg. No. 76127/

Toimi T. Teelahti
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2018-07-02

Electronic Acknowledgement Receipt

EFS ID:	33060806
Application Number:	14591952
International Application Number:	
Confirmation Number:	5164
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Customer Number:	95002
Filer:	Matthew Alan Swanson/Ross Worrell
Filer Authorized By:	Matthew Alan Swanson
Attorney Docket Number:	SCIH 2 US
Receipt Date:	02-JUL-2018
Filing Date:	08-JAN-2015
Time Stamp:	09:32:12
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		SCIH2US_2018-07-02_Amendment.pdf	97298 4980b10b1725b622daad1b4af8e986b8c948669f	yes	5

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Supplemental Response or Supplemental Amendment	1	1
	Claims	2	4
	Applicant Arguments/Remarks Made in an Amendment	5	5
Warnings:			
Information:			
	Total Files Size (in bytes):	97298	

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/591,952	Filing Date 01/08/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT **07/02/2018**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 7	Minus	** 20	= 0	X $50 =	0
Independent (37 CFR 1.16(h))	* 2	Minus	***4	= 0	X $230 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	0

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
LINDA HUMES

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
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UNITED STATES DEPARTMENT OF COMMERCE
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/591,952	01/08/2015	Lauri Valjakka	SCIH 2 US	5164

95002 7590 08/13/2018

Seppo Laine Oy
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FINLAND

EXAMINER
BAYOU, YONAS A

ART UNIT	PAPER NUMBER
2434	

NOTIFICATION DATE	DELIVERY MODE
08/13/2018	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

matthew.swanson@seppolaine.fi
posti@seppolaine.fi
toimi.teelahti@seppolaine.fi

Applicant-Initiated Interview Summary	Application No. 14/591,952	Applicant(s) Valjakka et al.		
	Examiner YONAS A BAYOU	Art Unit 2434	AIA (First Inventor to File) Status Yes	Page 1 of 2

All participants (applicant, applicants representative, PTO personnel):

1. YONAS A BAYOU (Primary Examiner); Telephonic 2. TOIMI T. TEELAHTI (Attorney); Telephonic

Date of Interview: 07 August 2018

Claims Discussed: CLAIMS 6 AND 9

Amendment proposed: APPLICANT AMENDED INDEPENDENT CLAIMS 6 AND 9 TO OVERCOME THE CURRENT 102 REJECTION.

Brief Description of the main topic(s) of discussion: APPLICANT DISCUSSED THE AMENDED CLAIMS 6 AND 9. THE AMENDED CLAIMS WILL BE REVIEWED IN DETAIL TO LOCATE ANOTHER PRIOR ART/S OR POSSIBLE ALLOWANCE.

Issues Discussed:

Proposed Amendments:
APPLICANT DISCUSSED THE LIMITATION THAT WAS AMENDED TO CLAIMS 6 AND 9, THE LIMITATION AMENDED: WHEREIN THE OBTAINING IS BASED AT LEAST IN PART ON A QUERY, THE QUERY COMPRISING THE CONTENT IDENTIFIER AND AN IDENTIFIER ASSOCIATED WITH THE USER;' WILL BE REVIEWED IN DETAIL TO LOCATE OTHER PRIOR ART/S OR POSSIBLE ALLOWANCE.

/YONAS A BAYOU/ Primary Examiner, Art Unit 2434	

Applicant is reminded that a complete written statement as to the substance of the interview must be made of record in the application file. It is the applicants responsibility to provide the written statement, unless the interview was initiated by the Examiner and the Examiner has indicated that a written summary will be provided. See MPEP 713.04
Please further see:
MPEP 713.04
Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b)
37 CFR § 1.2 Business to be transacted in writing

U.S. Patent and Trademark Office
PTOL-413/413b (Rev. 01/01/2015) **Interview Summary** Paper No. 20180807

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

UNITED STATES DEPARTMENT OF COMMERCE
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Alexandria, Virginia 22313-1450
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/591,952	01/08/2015	Lauri Valjakka	SCIH 2 US	5164

95002 7590 08/23/2018

Seppo Laine Oy
Itamerenkatu 3 A
Helsinki, FI00180
FINLAND

EXAMINER
BAYOU, YONAS A

ART UNIT	PAPER NUMBER
2434	

NOTIFICATION DATE	DELIVERY MODE
08/23/2018	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

matthew.swanson@seppolaine.fi
posti@seppolaine.fi
toimi.teelahti@seppolaine.fi

Office Action Summary	Application No. 14/591,952	Applicant(s) Valjakka et al.	
	Examiner YONAS A BAYOU	Art Unit 2434	AIA Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 07/02/2018.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☑ This action is **FINAL.** 2b) ☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 6-12 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) _____ is/are allowed.

7) ☑ Claim(s) 6-12 is/are rejected.

8) ☐ Claim(s) _____ is/are objected to.

9) ☐ Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☑ The drawing(s) filed on See Continuation Sheet is/are: a)☑ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☑ None of the:

1.☑ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

4) ☐ Other: _____.

Continuation of Application Papers 11): 01/08/2015

DETAILED ACTION

1. This Office Action is in response to Applicant's Arguments /Remarks filed on 07/02/2018 and 06/11/2018.

2. In the instant Amendment, claims 1-5 were previously cancelled; claims 6 and 9 have been amended; claims 10-12 are new claims; and claims 6 and 9 are independent claims. Claims 6-12 have been examined and are pending. **This Action is made FINAL**.

Notice of Pre-AIA or AIA Status

3. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Response to Arguments

4. Applicants' arguments in the instant Amendment, filed on 06/11/2018, with respect to limitations listed below, have been fully considered but they are not persuasive.

Applicant's arguments: "Claim 6, as amended, recites the limitation of *obtaining a first digital rights management key from the content database, wherein the obtaining is based at least in part on a query, the query comprising the content identifier and an identifier associated with the user*. Blankenbeckler does not appear to disclose wherein such a query comprises an identifier associated with the user."

The Examiner disagrees with the Applicants. The Examiner respectfully submits that Blankenbeckler discloses: '*obtaining a first digital rights management key from the content database, wherein the obtaining is based at least in part on a query, the query*

comprising the content identifier and an identifier associated with the user' (para. 0101 and figs. 4-7, The host system 400/user/client (see paras. 0024 and 0044, which inherently has an ID) may request the content key 700 based on a variety of parameters, such as a content identifier, and the like.). Examiner, however, in light of the above submission maintains the previous rejections while considering the amendments to the claims as follows:

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

6. **Claims 6-12 are rejected under 35 U.S.C. 102(a) (2)** as being anticipated by Blankenbeckler et al (hereinafter Blankenbeckler), Pub. No.: US 2013/0268771.

Referring to claim 6, Blankenbeckler teaches an apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to:

obtain an access restricted content from at least one of a content database and a content providing server *(para. 0038 and fig. 3, content database 302);*

obtain a first digital rights management key from the content database *(paras. 0013, 0038 and fig. 3, content database stores digital certificates/DRM key),* wherein the

obtaining is based at least in part on a query, the query comprising the content identifier and an identifier associated with the user *(para. 0101 and figs. 4-7, The host system 400/user/client (see paras. 0024 and 0044, which inherently has an ID) may request the content key 700 based on a variety of parameters, such as a content identifier, and the like.);*

using the first digital rights management key, obtain a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key *(abstract, DRM employs keys those keys are considered as a fingerprint (a unique access key) of the access of the restricted content; paras. 0012-0015, 0092 and fig. 7)*;

cause the content providing server to validate the fingerprint, and, if the validation is successful, access the access restricted content *(abstract, paras. 0012-0015)* and

derive a second digital rights management key from the access restricted content; using the digital rights management header of the access restricted content *(para. 0101 and figs. 4-5, content key 700 (the claimed* 'a second digital rights management key' *) may be retrieved from the content metadata).*

Referring to claim 7, Blankenbeckler further teaches wherein the second digital rights management key is at least in part operable to obtain a content payload from the access restricted content key *(abstract and paras. 0012-0015).*

Referring to claim 8, Blankenbeckler further teaches wherein the apparatus is caused to obtain the first digital rights management key either by receiving it from a

server or by generating it at least in part from at least one of environmental parameters and parameters of the access restricted content *(paras. 0013, 0038, 0101 and figs. 3-5).*

Referring to claim 9, This claim is similar in scope to claim 6, and is therefore rejected under similar rationale.

Referring to claim 10, Blankenbeckler further teaches wherein the first digital rights management key is unique to a specific session *(paras. 0013, 0038 and fig. 3, digital certificates/DRM key is unique).*

Referring to claim 11, Blankenbeckler further teaches wherein the access restricted content comprises a first layer that is decryptable using the first digital rights management key, the first layer comprising information on which key may be used to obtain fuller access to the access restricted content *(paras. 0045, 0062, 0079-0080, cryptographically protected).*

Referring to claim 12, This claim is similar in scope to claim 10, and is therefore rejected under similar rationale.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YONAS A BAYOU whose telephone number is (571)272-7610. The examiner can normally be reached on Monday-Friday 7AM-4PM.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571-272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YONAS A BAYOU/
Primary Examiner, Art Unit 2434
08/13/2018

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/591,952	Valjakka et al.
	Examiner	Art Unit
	YONAS A BAYOU	2434

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	06/14/2016	09/15/2016	06/29/2017	12/01/2017	08/13/2018				
	1	÷	N	-	-	-				
	2	÷	N	-	-	-				
	3	÷	N	-	-	-				
	4	÷	N	-	-	-				
	5	÷	N	-	-	-				
	6	÷	✓	✓	✓	✓				
	7	÷	✓	✓	✓	✓				
	8	÷	✓	✓	✓	✓				
	9	÷	✓	✓	✓	✓				
	10					✓				
	11					✓				
	12					✓				

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/591,952	Valjakka et al.
	Examiner	Art Unit
	YONAS A BAYOU	2434

CPC - Searched*		
Symbol	Date	Examiner
G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102	9/15/2016	

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102	9/15/2016	yb
East Search (such as Inventor's and Assignee's Name Search, CPC, Keywords), Inventor Search and Reviewed related Cases.	9/15/2016	yb
Search is updated	12/1/2017	yb
Search is updated	08/13/2018	yb

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/YONAS BAYOU/ Primary Examiner.Art Unit 2434	

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	19	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20130268771" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/13 14:18
S1	1	14/591952	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:42
S2	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:43
S3	367	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:45
S4	10086	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in. (access$3 with restri$4).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:46
S5	1	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in. and (access$3 with restri$4).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:46
S6	1	"SC Intelligent Holding"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:49
S7	2563	(access$3 near3 (restricted adj (content	US-PGPUB;	OR	ON	2016/06/14

		file document information resource packet video game application app)))	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			15:55
S8	2255	(access$3 near3 (restricted adj (content file document information resource packet video game application app))) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:56
S9	127	(access$3 near3 (restricted adj (content file document information resource packet video game application app))) and @ad<"20140108" and (G06F21/10).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:56
S10	5576	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:57
S11	1668	S10 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:58
S12	3	S10 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.) AND S9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:58
S13	113	(access$3 WITH (restricted adj (content file document information resource packet video game application app))).TI. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:59
S14	1	(access$3 WITH (restricted adj (content file document information resource packet video game application app))).TI. and @ad<"20140108" AND S11	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:59
S15	1	"digital rights management keys" with "access restricted content"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2016/09/15 10:54

			IBM_TDB			
S16	2	"digital rights management" with "access restricted content"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 10:56
S17	3	10/265437	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 11:11
S18	16	("5191573" | "5629980" | "5734823" | "5734891" | "5892900" | "5907288" | "5940591" | "6134662" | "6185683" | "6212633" | "6253193" | "6327660" | "6891953" | "6970849").PN. OR ("7865964").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/09/15 11:12
S19	161	"digital rights management keys"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S20	5672	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S21	1744	S20 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S22	0	"digital rights management keys" and S21	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S23	132	"digital rights management keys" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S24	6	"digital rights management keys" and @ad<"20140108" and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2016/09/15 12:09

			DERWENT; IBM_TDB			
S25	17	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 17:03
S26	4	"8495167"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 18:04
S27	1	13/723283	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 18:05
S28	0	15/199481	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/16 15:19
S29	2	14/526360	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/16 15:19
S30	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 11:46
S31	5	"second digital rights management key" and "first digital rights management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:30
S32	4	"second digital rights management key" and "first digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:31
S33	76	"second digital rights management" and "first digital rights management" and @ad<"20140108"	US-PGPUB; USPAT; USOCR;	OR	ON	2017/04/05 14:33

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S34	5753	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:34
S35	1819	S34 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:34
S36	0	"second digital rights management" and "first digital rights management" and @ad<"20140108" and S35	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:34
S37	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/26 14:42
S38	5	"20140059156"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/26 14:50
S39	38	("20020069132" | "20040252967" | "20060062363" | "20060069749" | "20070179854" | "20080095370" | "20080119132" | "20080270579" | "20080310815" | "20090254971" | "20090288112" | "20090288131" | "20100138865" | "20100169502" | "20100251305" | "20110047134" | "20110093900" | "20110103374" | "20110177773" | "20110197236" | "20110202383" | "20120042050" | "20120252352" | "20130031211" | "6016520" | "6571279" | "6671424" | "6766376" | "7403618" | "7565399" | "7630986" | "7941092" | "8078096" | "8180276" | "8385813" | "8489673" | "8745158" | "8898708").PN. OR ("9215269").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/06/26 14:50
S40	60	"1189432"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2017/06/26 14:52

			DERWENT; IBM_TDB			
S41	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:15
S42	5829	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:37
S50	5	"second Digital right management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:39
S51	4	"second Digital right management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:39
S54	3	"second drm key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:44
S55	241	((creat$4 driv$4 generat$4) near3 (drm adj (license key))) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:57
S56	1844	S42 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:58
S57	2	((creat$4 driv$4 generat$4) near3 (drm adj (license key))) and @ad<"20140108" and S56	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:58
S58	85	((creat$4 driv$4 generat$4) near3 ((drm adj (license key "second key")) key "second key") near3 (content	US-PGPUB; USPAT; USOCR;	OR	ON	2017/06/27 14:06

		information file document)) and @ad<"20140108" and S56	FPRS; EPO; JPO; DERWENT; IBM_TDB			
S60	7	from adj content	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 14:27
S66	5480	(DRM "DIGITAL RIGHT MANAGEMENT").ti. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 14:51
S70	81	(DRM "DIGITAL RIGHT MANAGEMENT").ti. and @ad<"20140108" AND ((creat$4 driv$4 generat$4 COMPUT$4) near3 (drm adj (license key)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 14:53
S73	6	"20080109368"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:46
S74	4	"first digital rights management key" and "second digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:50
S75	0	"first DRM key" and "second DRM key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:51
S76	397	"first DRM" and "second DRM" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:58
S77	0	"first DRM" and "second DRM" and @ad<"20140108" and S56	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:58
S78	7	"20150110035"	US-PGPUB;	OR	ON	2017/06/28

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			13:28
S79	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:33
S80	1196	("content protection key" "digital rights management key" "DRM key")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S81	5829	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S82	1844	S81 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S83	0	("content protection key" "digital rights management key" "DRM key") and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S84	988	("content protection key" "digital rights management key" "DRM key") and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:36
S85	107	("content protection key" "digital rights management key" "DRM key") and @ad<"20140108" and ("digital rights management").ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:36
S86	15	("content protection key" "digital rights management key" "DRM key") and @ad<"20140108" and ("digital rights management").ti. and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2017/06/28 13:37

			IBM_TDB			
S87	15	(("content protection key" "digital rights management key" "DRM key") near3 database) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:47
S88	106	(("content protection key" "digital rights management key" "DRM key" license) near5 "content database") and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:31
S89	3	"20110314488"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:33
S90	1841	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:58
S91	0	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and (acces$4 with contol$4 with right).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:59
S92	0	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and (acces$4 with contol$4).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:59
S93	0	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:59
S94	68	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and "digital rights management"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 15:00
S95	6	(driv$3 near5 key near5 (file content image video movie information document media)) and @ad<"20140108" and S82	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2017/06/28 15:45

			EPO; JPO; DERWENT; IBM_TDB			
S96	152	((generat$4 comput$4 creat$4 driv$3) near5 key near5 (file content image video movie information document media)) and @ad<"20140108" and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 15:46
S97	27	((generat$4 comput$4 creat$4 driv$3) near5 key near5 (file content image video movie information document media)) and @ad<"20140108" and S82 and DRM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 15:47
S98	3347	(DRIVE ADJ KEY) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 16:00
S99	1	(DRIVE ADJ KEY) and @ad<"20140108" AND S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 16:01
S100	34	(DRIV$3 ADJ KEY) and @ad<"20140108" AND DRM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 16:02
S101	3461	(from near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:05
S102	0	((key license token certificate) adj from near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:06
S103	14	((key license token certificate) near2 from near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:07
S104	2	(from near2 (content video image media stream file document information	US-PGPUB; USPAT;	OR	ON	2017/06/29 07:10

		message text)) and @ad<"20140108" and ("digital right management" DRM "content protected" "content protection")	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S105	686	(from adj (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S106	5829	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S107	1844	S106 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S108	0	(from adj (content video image media stream file document information message text)) and @ad<"20140108" and S107	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S109	246160	((key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:15
S110	291	((key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108" and S107	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:15
S111	38569	((driv$3 generat$4 creat$4 found comput$4 obtain$4 get$4) near2 (key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:17
S112	92	((driv$3 generat$4 creat$4 found comput$4 obtain$4 get$4) near2 (key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108" and S107	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:18

S113	28	"2993604"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:20
S114	50	"617189"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:21
S115	2	"617189p"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:22
S116	3	"20070220610"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:22
S117	14	("20020013772" | "20020038348" | "20020157002" | "20030076955" | "20030196099" | "20040017916" | "20040093523" | "20040107368" | "20050050345" | "20050071663" | "20050102513" | "20050265555" | "6728379" | "7305087").PN. OR ("8875299").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/06/29 09:23
S118	0	("content key").ti. and @ad<"20140108" and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:01
S119	555	("content key").ti. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:01
S120	54	("content key").ti. and @ad<"20140108" and drm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:01
S121	44	(key adj from) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2017/06/29 10:14

			EPO; JPO; DERWENT; IBM_TDB			
S122	4	"20130073466"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:24
S123	188	drive near3 key near3 content	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:30
S124	180	(drive near3 key near3 content) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:30
S125	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:51
S126	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:13
S127	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:13
S128	8	obtain$3 near3 "digital rights management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:14
S129	3	obtain$3 near5 "digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:14
S130	10	"20100114730"	US-PGPUB; USPAT;	OR	ON	2017/06/29 11:17

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S131	1	10/099931	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:36
S132	1	11/254315	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:43
S133	1	11/255692	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:55
S134	1	11/159754	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:58
S135	1	12/425490	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:04
S136	5	"8290427"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:10
S137	4	12/265732	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:11
S138	1	13/333894	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:15

S139	19	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20130268771" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 14:25
S140	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:20
S141	17	("20040030650" | "20080263356" | "20090052671" | "20120066754" | "20120303974" | "6205550" | "6609199" | "6832319" | "7024393" | "7155616" | "7215771" | "7356143" | "7467304" | "7594275" | "7925894").PN. OR ("8831217").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/12/01 11:20
S142	40	"2013/0268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:21
S143	0	2012/0308008	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:21
S144	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:22
S145	19	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20130268771" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 13:33
S146	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/07 09:39
S147	17	("20040030650" | "20080263356" | "20090052671" | "20120066754" | "20120303974" | "6205550" | "6609199" | "6832319" | "7024393" | "7155616" | "7215771" | "7356143" |	US-PGPUB; USPAT; USOCR	OR	OFF	2018/08/07 09:40

		"7467304" | "7594275" | "7925894").PN. OR ("8831217").URPN.				
S148	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/07 09:40
S149	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/10 14:08
S150	1	15/448796	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/13 09:51
S151	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/13 11:35

EAST Search History (Interference)

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PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/591,952	Filing Date 01/08/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☑ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $40 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $210 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT	02/21/2019	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 12	Minus	** 20	= 0		x $50 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	*** 3	= 0		x $230 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	0

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $0 =	
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.	
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	/DARRYL FORTE/
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	14/591,952	Filing Date	2015-01-08	Docket Number (if applicable)	SCIH 2 US	Art Unit	2434
First Named Inventor	VALJAKKA, Lauri			Examiner Name	BAYOU, Yonas A.		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☒ Amendment/Reply
- ☒ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☒ Other Petition for Extension of Time Under 37 CFR 1.136(a)

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____ (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

☐ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No _____

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

Applicant Signature

PTO/SB/30EFS (02-18)
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Signature of Registered U.S. Patent Practitioner			
Signature	/Toimi Teelahti Reg. No. 76127/	Date (YYYY-MM-DD)	2019-02-21
Name	Toimi Teelahti	Registration Number	76127

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 14/591,952 Confirmation No. : 5164
First Named Inventor : Lauri Valjakka
Filing Date : 01/08/2015
TC/AU : 2434
Examiner : Bayou, Yonas A

Attorney Docket No. : SCIH 2 US

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO FINAL OFFICE ACTION AND REQUEST FOR CONTINUED EXAMINATION

INTRODUCTORY COMMENTS

In response to the Final Office Action dated August 23, 2018, a Request for Continued Examination under 37 CFR § 1.114 is herewith filed. Please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 5 of this paper.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1 – 5. (Cancelled)

6. (Currently amended) An apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to:

- obtain an access restricted content from at least one of a content database and a content providing server;
- obtain a first digital rights management key from the content database, wherein the obtaining is based at least in part on a query, the query comprising the content identifier and an identifier associated with the user;
- using the first digital rights management key, obtain a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key,
- cause the content providing server to validate the fingerprint, and, if the validation is successful, access the access restricted content and
- derive a second and third digital rights management key from the access restricted content using the digital rights management header of the access restricted content

wherein the second and third digital rights management keys are applied to retrieve the payload of the access restricted content and wherein at least one of the second or third digital rights management key is used to encrypt the other key of the second or third digital rights management key.

7. (Cancelled).

8. (Previously Presented) The apparatus according to claim 6, wherein the apparatus is caused to obtain the first digital rights management key either by receiving it from a server or by generating it at least in part from at least one of environmental parameters and parameters of the access restricted content.

9. (Currently amended) A method, comprising:
   - obtaining an access restricted content from at least one of a content database and a content providing server;
   - obtaining a first digital rights management key from a content database, wherein the obtaining is based at least in part on a query, the query comprising the content identifier and an identifier associated with the user;
   - deriving, using the first digital rights management key, from the access restricted content a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key,
   - causing the content providing server to validate the fingerprint, and, if the validation is successful, accessing the access restricted content and
   - information describing encryption properties of the access restricted content, and
   - deriving, using the digital rights management header of the access restricted content, from the access restricted content a second and third digital rights management key,
     wherein the second and third digital rights management keys are applied to retrieve the payload of the access restricted content and wherein at least one of the second or third digital rights management key is used to encrypt the other key of the second or third digital rights management key.

10. (Previously presented). The apparatus of claim 6, wherein the first digital rights management key is unique to a specific session.

11. (Previously presented) The apparatus of claim 6, wherein the access restricted content comprises a first layer that is decryptable using the first digital rights management key, the

first layer comprising information on which key may be used to obtain fuller access to the access restricted content.

12. (Previously presented) The method of claim 9, wherein the first digital rights management key is unique to a specific session.

13. (New) The apparatus of claim 6, wherein the first, second and third digital rights management keys are each encrypted with 256 bit AES encryption.

14. (New) The apparatus of claim 6, wherein at least one of the content database and the content providing server comprise a content registration module, wherein said content registration module registers the usage of the content on the content database with respect to the user identifier and the content identifier.

15. (New) The apparatus of claim 15, wherein said status content usage includes the calculated time period associated with the user identifier and the content identifier.

16. (New) The apparatus of claim 6, wherein the content is usable without being in an unprotected state.

17. (New) The apparatus of claim 6, wherein the apparatus retrieves the first digital rights management key from at least one of the content database and the content providing server when required.

18. (New) The apparatus of claim 6, wherein the apparatus generates the first digital rights management key when required, the generation being based on environment and media parameters.

REMARKS/ARGUMENTS

Claims 6, 8, and 9–18 are pending. Claim 7 has been cancelled herein. Claims 6 and 9 have been amended herein based on at least Figures 8–10 of the application as filed. Claims 13–18 have been added herein based on at least Figures 8–10 of the application as filed as well as page 13 lines 30 – page 14 line 1 and page 18 line 28. ***No new matter has been added.***

Regarding Rejections under 35 U.S.C. § 102

Regarding novelty rejections based on Blankenbeckler

The Examiner rejects claims 6 – 9 under 35 U.S.C. § 102 as being anticipated by US Patent Publication 2013/0268771 ('Blankenbeckler'). The Applicant respectfully traverses the rejection for at least the reason that Blankenbeckler does not disclose each and every element of the claims. Claims 6 and 9 have been amended herein to recite wherein *at least one of the second or third digital rights management key is used to encrypt the other key of the second or third digital rights management keys.*

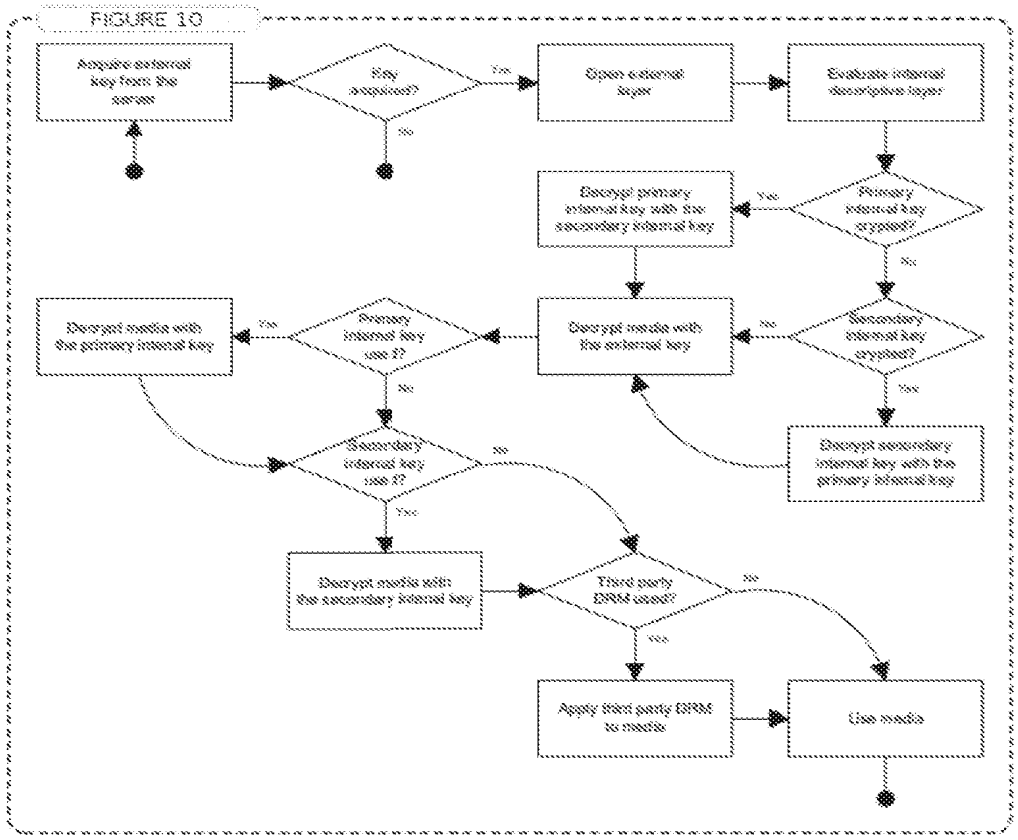


Figure 10 of the application as filed.

Blankenbeckler, as can be seen Figure 7, appears to disclose a DRM system wherein the download server requests the binding key (Key #1) from the storage device (user device) and the storage device responds by generating that key based on the content and the device unique key. The server then retrieves the content key (Key #2) from the key server and uses the binding key in combination with the content key to generate an access key (Key #3). The content key and the encrypted content are then provided to the storage device and stored in separate locations.

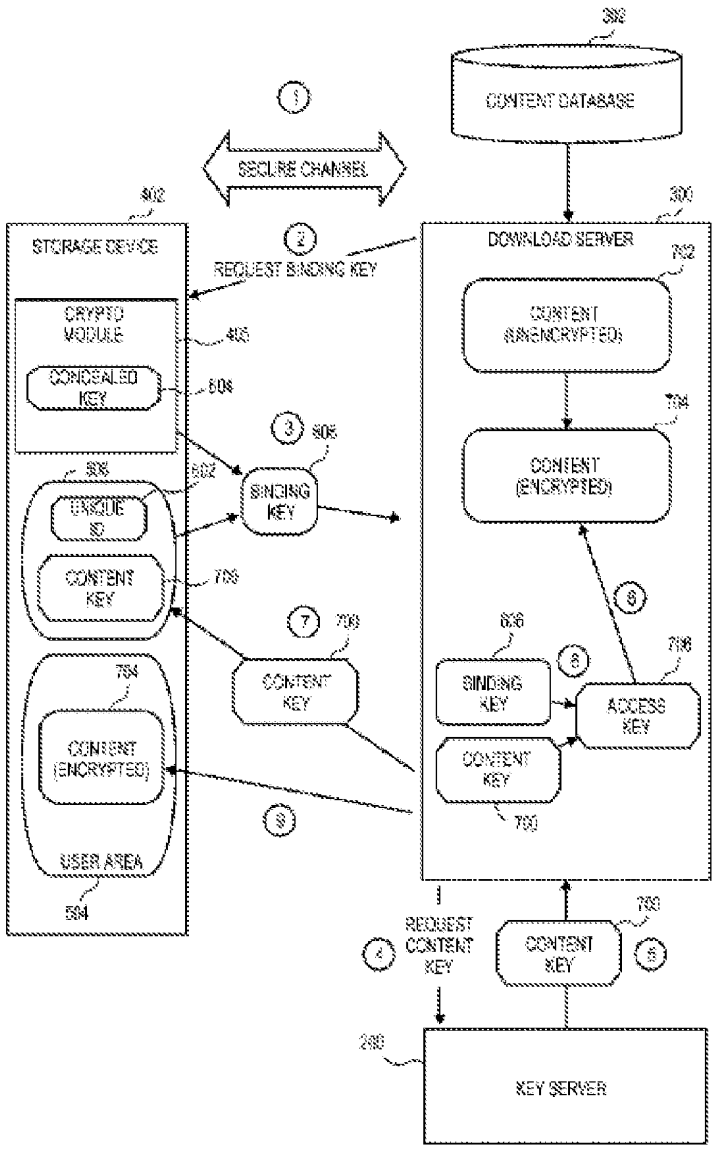


Figure 7 of Blanckenbeckler.

Therefore, it does not appear that Blankenbeckler discloses wherein *at least one of the second or third digital rights management key is used to encrypt the other key of the second or third digital rights management key,* as recited in amended claim 6.

It follows that claims 6 and 9 are patentable over Blankenbeckler for at least the reason that Blankenbeckler fails to disclose each and every limitation of the claim. The remaining claims 8 and 10–18 are dependent on claim 6 or claim 9 and therefore include the above-mentioned limitation. Thus, claims 8–18 are patentable over Blankenbeckler for the reasons previously indicated with respect to claim 6.

Reconsideration and withdrawal of the present rejections is respectfully requested.

CONCLUSION

The Applicant believes that that present application is in condition for allowance. Notice of the same is earnestly solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Toimi Teelahti, Reg. No. 76127 at (571) 335-7960, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Respectfully submitted,

/ Toimi T. Teelahti Reg. No. 76127/

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2019-02-21

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	:	14/591,952
First Named Inventor	:	VALJAKKA, Lauri
Filed	:	January 08, 2015
TC/AU	:	2434
Examiner	:	BOYOU, Yonas A.
Attorney Docket No.	:	SCIH 2 US

M/S Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

☒ The patents, publications, or other information submitted for consideration by the Office are listed on the PTO-SB08(s) attached hereto.

II. COPIES OF CITED DOCUMENTS

☐ Copies of all of the foreign patent documents and non-patent literature are included.

☐ Copies of all of the foreign patent documents and non-patent literature are included except for the following for the corresponding indicated reasons:

III. CONCISE EXPLANATION OF THE RELEVANCE

☒ For Documents in the English language listed on the attached PTO-SB08(s) it is believed that no statement of relevancy is required.

☐ The following foreign language documents correspond to the indicated English language documents:

Foreign language document	Corresponding English language document

Therefore, it is believed that this in conjunction with the indicated English language documents satisfies the relevancy requirement.

☐ An English language version of a search report or action that indicates the degree of relevance found by the foreign office is attached, it is believed that this satisfies the requirement for a concise explanation of the corresponding documents. See MPEP 609(III)(A)(3).

☐ A concise explanation of foreign language documents not covered by an indication above is as follows:

* 0 Additional page(s) of explanation are attached.

IV. STATEMENT UNDER 37 CFR 1.97(e)

☐ I hereby state that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this statement.

☐ I hereby state that no item of information in the Information Disclosure Statement filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, no item of information contained in this information Disclosure Statement was known to any individual designated in 37 CFR 1.56(c) more than 3 months prior to the filing of this information Disclosure Statement.

* When no box has been checked in this section then no statement is being made.

V. FEES

☒ This Information Disclosure Statement is being filed concurrently with the filing of a new patent application or RCE, therefore no fee is required.

☐ This Information Disclosure Statement is being filed within three months of the date of entry of the national stage as set forth in §1.491 in an international application (37 C.F.R. §1.97(b)(2)), within three months from the filing of a national application or before the mailing date of a first Office action on the merits in an RCE, national application or national stage entry of an international application, therefore no fee is required.

☐ This Information Disclosure Statement is being filed before the mailing date of a Final Office Action under 37 C.F.R. §1.113 or before the mailing date of a Notice of Allowance under 37 C.F.R. §1.311.

☐ a fee as required by 37 C.F.R. §1.17(p) is attached.

☐ a statement in accordance with 37 CFR 1.97(e) as indicated above is attached.

☐ This Information Disclosure Statement is being filed on or after the mailing date of a Final Office Action under 37 C.F.R. §1.113 or a Notice of Allowance under 37 C.F.R. §1.311 but before or simultaneously with the payment of an issue fee.

☐ [a fee as required by 37 C.F.R. §1.17(p) and a statement in accordance with 37 CFR 1.97(e) as indicated above is attached.

If the Examiner has any questions concerning this Information Disclosure statement they are requested to contact the undersigned. If it is determined that this Information Disclosure Statement has been filed under the wrong rule, the Office is requested to consider this statement under the proper rule.

Respectfully submitted,

/ Toimi T. Teelahti Reg. No.76127 /

Toimi T. Teelahti
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February 21, 2019

PTO/SB/08a (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 1

Complete if Known	
Application Number	14/591,952
Filing Date	January 08, 2015
First Named Inventor	VALJAKKA, Lauri
Art Unit	2434
Examiner Name	BAYOU, Yonas A.
Attorney Docket Number	SCIH 2 US

U.S. PATENT DOCUMENTS

Examiner initial *	Cite No.	Document Number Number - Kind Code [2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US-20050071280 - A1	03-31-2005	IRWIN et al	
	2	US-20110010298 - A1	01-13-2011	ROBERT et al	
	3	US-20130024701 - A1	01-24-2013	HWANG et al	
	4	US-20150101069 - A1	04-09-2015	STAPPENBECK et al	

FOREIGN PATENT DOCUMENTS

Examiner Initial *	Cite No. 1	Foreign Patent Document Country [3] Code Number [4] Kind Code (if known) [5]	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear	T

Examiner Signature		Date Considered	

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not Considered. Include copy of this form with next communication to applicant. 1. Applicant´s unique citation design number (optional). 2 See Kinds Codes of USPTO patent Documents. at www.uspto.gov or MPEP 901.04. 3. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4. For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assisstance in completing the form, call 1-800-PTO-9199 (1-800-786.9199) and select option 2.

PTO/AIA/22 (03-13)
Approved for use through 11/30/2020. OMB 0651-0031
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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)

Docket Number (Optional): SCIH 2 US

Application Number: 14/591,952

Filed: 2015-01-08

For: A method of and system for providing access to access restricted content to a user

Art Unit: 2434

Examiner: BAYOU, Yonas A.

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

		Fee	Small Entity Fee	Micro Entity Fee	
☐	One month (37 CFR 1.17(a)(1))	$200	$100	$50	$
☐	Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$
☑	Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$ 700
☐	Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
☐	Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

☑ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☐ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number _____.

☑ Payment made via EFS-Web.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant.

☑ attorney or agent of record. Registration number 76127.

☐ attorney or agent acting under 37 CFR 1.34. Registration number _____.

/Toimi Teelahti Reg. No. 76127/ — Signature

2019-02-21 — Date

Toimi Teelahti — Typed or printed name

571-335-7960 — Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☑ * Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	14591952
Filing Date:	08-Jan-2015
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Filer:	Matthew Alan Swanson/Ross Worrell
Attorney Docket Number:	SCIH 2 US

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 3 months with $0 paid	2253	1	700	700
Miscellaneous:				
RCE- 2ND AND SUBSEQUENT REQUEST	2820	1	950	950
		Total in USD ($)		**1650**

Electronic Acknowledgement Receipt

EFS ID:	35208360
Application Number:	14591952
International Application Number:	
Confirmation Number:	5164
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Customer Number:	95002
Filer:	Matthew Alan Swanson/Ross Worrell
Filer Authorized By:	Matthew Alan Swanson
Attorney Docket Number:	SCIH 2 US
Receipt Date:	21-FEB-2019
Filing Date:	08-JAN-2015
Time Stamp:	10:02:59
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$1650
RAM confirmation Number	022119INTEFSW10033000
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	SCIH2US_2019-02-21_SB0030EFS_RCE_transmittal.pdf	1349989 bf191cc71d4a2f61bf900bca3d7e05b8f59c462a	no	3
Warnings:					
Information:					
2		SCIH2US_2019-02-21_RCE.pdf	217949 7704faddf2e8e74eaf220f79c33035df48b35f64	yes	7

Multipart Description/PDF files in .zip description

Document Description	Start	End
Amendment Submitted/Entered with Filing of CPA/RCE	1	1
Claims	2	4
Applicant Arguments/Remarks Made in an Amendment	5	7

Warnings:					
Information:					
3	Transmittal Letter	SCIH2US_2019-02-21_IDS_transmittal.pdf	244180 37f0056987748e0355cb9e0a88a80093706ae722	no	4
Warnings:					
Information:					
4	Information Disclosure Statement (IDS) Form (SB08)	SCIH2US_2019-02-21_IDS_form.pdf	75448 77e1cce408bd5d1f9fe0ec5f5cd0535cb36cbe8b	no	1
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					

5	Extension of Time	SCIH2US_2019-02-21_AIA0022_Extension.pdf	164325 297371827b908bf7d6d9335dbb7bce7aadefdb17	no	2
Warnings:					
Information:					
6	Fee Worksheet (SB06)	fee-info.pdf	32663 9d3ed76cac7e796884aa5cb3f15fe2481d4952ef	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	2084554		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/591,952	01/08/2015	Lauri Valjakka	SCIH 2 US	5164

95002 7590 03/20/2019

Seppo Laine Oy
PO Box 339
Helsinki, FI-00181
FINLAND

EXAMINER	
BAYOU, YONAS A	

ART UNIT	PAPER NUMBER
2434	

NOTIFICATION DATE	DELIVERY MODE
03/20/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

matthew.swanson@seppolaine.fi
posti@seppolaine.fi
toimi.teelahti@seppolaine.fi

Office Action Summary	Application No. 14/591,952	Applicant(s) Valjakka et al.	
	Examiner YONAS A BAYOU	Art Unit 2434	AIA (FITF) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 02/21/2019.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL.** 2b) ☑ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 6 and 8-18 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) _____ is/are allowed.

7) ☑ Claim(s) 6,8-14 and 17-18 is/are rejected.

8) ☑ Claim(s) 15-16 is/are objected to.

9) ☐ Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☑ The drawing(s) filed on 01/08/2015 is/are: a)☑ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☑ None of the:

1.☑ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☑ Notice of References Cited (PTO-892)

2) ☑ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date 02/21/2019.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

4) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to Applicant's Arguments /Remarks and RCE filed on 02/21/2019.

2. As per instant Amendment, Claims 6 and 9 have been amended; Claims 1-5 and 7 have been canceled; Claims 13-18 have been added; Claims 6 and 9 are independent claims. Claims 6 and 8-18 have been examined and are pending. **This Action is made Non-FINAL**.

Notice of Pre-AIA or AIA Status

3. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/21/2019 has been entered.

Information Disclosure Statement

5. The information disclosure statement (IDS), submitted on 02/21/2019, is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Arguments

6. Applicant's arguments, see Applicant's Arguments /Remarks, filed 02/21/2019, with respect to the rejection(s) of claim(s) 6-12 under 35 U.S.C. 102(a) (2) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made over Blankenbeckler et al (hereinafter Blankenbeckler), Pub. No.: US 2013/0268771 in view of Roos et al (hereinafter Roos), Pub. No.: US 2010/0268649.

Claim Objections

7. Claims 6 and 9 are objected to because of the following informalities: In independent claims 6 and 9, there is a lack of antecedent basis for terms "the other key of the second or third digital rights management key", because the terms have not been previously claimed. Appropriate correction is required.

8. Claim 15 is objected to because of the claim depends to itself. Appropriate correction is required.

Claim Rejections - 35 USC § 103

9. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

10. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 6, 8-14 and 17-18 are rejected under 35 U.S.C. 103** as being unpatentable over Blankenbeckler et al (hereinafter Blankenbeckler), Pub. No.: US 2013/0268771 in view of Roos et al (hereinafter Roos), Pub. No.: US 2010/0268649.

Referring to claim 6, Blankenbeckler teaches an apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to:

obtain an access restricted content from at least one of a content database and a content providing server (para. 0038 and fig. 3, content database 302);

obtain a first digital rights management key from the content database (paras. 0013, 0038 and fig. 3, content database stores digital certificates/DRM key), wherein the obtaining is based at least in part on a query, the query comprising the content identifier and an identifier associated with the user (para. 0101 and figs. 4-7, *The host system*

400/user/client (see paras. 0024 and 0044, which inherently has an ID) may request the content key 700 based on a variety of parameters, such as a content identifier, and the like.);

using the first digital rights management key, obtain a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key *(abstract, DRM employs keys those keys are considered as a fingerprint (a unique access key) of the access of the restricted content; paras. 0012-0015, 0092 and fig. 7)*;

cause the content providing server to validate the fingerprint, and, if the validation is successful, access the access restricted content *(abstract, paras. 0012-0015)* and

derive a second and third digital rights management key from the access restricted content; using the digital rights management header of the access restricted content (para. 0101 and figs. 4-5, *content key 700 (the claimed* 'a second digital rights management key'*) may be retrieved from the content metadata*).

Blankenbeckler does not explicitly disclose wherein the second and third digital rights management keys are applied to retrieve the payload of the access restricted content and wherein at least one of the second or third digital rights management key is used to encrypt the other key of the second or third digital rights management key.

However, in an analogous art, Roos discloses a wherein the second and third digital rights management keys are applied to retrieve the payload of the access restricted content and wherein at least one of the second or third digital rights management key is used to encrypt the other key of the second or third digital rights management key *(paras.*

0010, 0012, 0027, 0036 and fig. 1, content encryption key encrypted with a digital rights management key associated with the digital rights management agent).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Blankenbeckler with the method and system of Roos, wherein the second and third digital rights management keys are applied to retrieve the payload of the access restricted content and wherein at least one of the second or third digital rights management key is used to encrypt the other key of the second or third digital rights management key to provide users with a means for advantageous use of Digital Rights Management (DRM) systems to simplify electronic ticket issuance, storage, and redemption. *(Roos: para. 0001).*

Referring to claim 8, Blankenbeckler and Roos teach the apparatus according to claim 6. Blankenbeckler further teaches wherein the apparatus is caused to obtain the first digital rights management key either by receiving it from a server or by generating it at least in part from at least one of environmental parameters and parameters of the access restricted content *(Blankenbeckler: paras. 0013, 0038, 0101 and figs. 3-5).*

Referring to claim 9, This claim is similar in scope to claim 6, and is therefore rejected under similar rationale.

Referring to claim 10, Blankenbeckler and Roos teach the apparatus according to claim 6. Blankenbeckler further teaches wherein the first digital rights management key

is unique to a specific session *(Blankenbeckler: paras. 0013, 0038 and fig. 3, digital certificates/DRM key is unique).*

Referring to claim 11, Blankenbeckler and Roos teach the apparatus according to claim 6. Blankenbeckler further teaches wherein the access restricted content comprises a first layer that is decryptable using the first digital rights management key, the first layer comprising information on which key may be used to obtain fuller access to the access restricted content (Blankenbeckler: paras. 0045, 0062, 0079-0080, *cryptographically protected*).

Referring to claim 12, This claim is similar in scope to claim 10, and is therefore rejected under similar rationale.

Referring to claim 13, Blankenbeckler and Roos teach the apparatus according to claim 6. Roos further teaches wherein the first, second and third digital rights management keys are each encrypted with 256 bit AES encryption *(Roos: para. 0050, an encryption algorithm and fig. 6).*

Referring to claim 14, Blankenbeckler and Roos teach the apparatus according to claim 6. Blankenbeckler further teaches wherein at least one of the content database and the content providing server comprise a content registration module, wherein said content registration module registers the usage of the content on the content database with respect to the user identifier and the content identifier *(Blankenbeckler: para. 0017).*

Referring to claim 17, Blankenbeckler and Roos teach the apparatus according to claim 6. Blankenbeckler further teaches wherein the apparatus retrieves the first digital rights management key from at least one of the content database and the content providing server when required (Blankenbeckler: *para. 0038 and fig. 3, content database 302).*

Referring to claim 18, Blankenbeckler and Roos teach the apparatus according to claim 6. Blankenbeckler further teaches wherein the apparatus generates the first digital rights management key when required, the generation being based on environment and media parameters *(Blankenbeckler: paras. 0013, 0038, 0101 and figs. 3-5).*

Allowable Subject Matter

12. Claims 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YONAS A BAYOU whose telephone number is (571)272-7610. The examiner can normally be reached on Monday-Friday 7AM-4PM.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an

interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571-272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YONAS A BAYOU/
Primary Examiner, Art Unit 2434
03/12/2019

Notice of References Cited	Application/Control No. 14/591,952	Applicant(s)/Patent Under Reexamination Valjakka et al.	
	Examiner YONAS A BAYOU	Art Unit 2434	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20130268771-A1	10-2013	BLANKENBECKLER; David L.	H04L9/0866	713/189
*	B	US-20100268649-A1	10-2010	Roos; Johan	G06F21/10	705/50
	C					
	D					
	E					
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/591,952	Valjakka et al.
	Examiner	Art Unit
	YONAS A BAYOU	2434

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	06/14/2016	09/15/2016	06/29/2017	12/01/2017	08/13/2018	03/12/2019			
	1	÷	N	-	-	-	-			
	2	÷	N	-	-	-	-			
	3	÷	N	-	-	-	-			
	4	÷	N	-	-	-	-			
	5	÷	N	-	-	-	-			
	6	÷	✓	✓	✓	✓	✓			
	7	÷	✓	✓	✓	✓	-			
	8	÷	✓	✓	✓	✓	✓			
	9	÷	✓	✓	✓	✓	✓			
	10					✓	✓			
	11					✓	✓			
	12					✓	✓			
	13						✓			
	14						✓			
	15						O			
	16						O			
	17						✓			
	18						✓			

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/591,952	Valjakka et al.
	Examiner	Art Unit
	YONAS A BAYOU	2434

CPC - Searched*		
Symbol	Date	Examiner
G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102	9/15/2016	

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102	9/15/2016	yb
East Search (such as Inventor's and Assignee's Name Search, CPC, Keywords), Inventor Search and Reviewed related Cases.	9/15/2016	yb
Search is updated	12/1/2017	yb
Search is updated	08/13/2018	yb
Search is updated	03/12/2019	yb

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/YONAS BAYOU/ Primary Examiner.Art Unit 2434	

PTO/SB/08a (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 1

Complete if Known	
Application Number	14/591,952
Filing Date	January 08, 2015
First Named Inventor	VALJAKKA, Lauri
Art Unit	2434
Examiner Name	BAYOU, Yonas A.
Attorney Docket Number	SCIH 2 US

U.S. PATENT DOCUMENTS

Examiner initial *	Cite No.	Document Number Number - Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US-20050071280 - A1	03-31-2005	IRWIN et al	
	2	US-20110010298 - A1	01-13-2011	ROBERT et al	
	3	US-20130024701 - A1	01-24-2013	HWANG et al	
	4	US-20150101069 - A1	04-09-2015	STAPPENBECK et al	

FOREIGN PATENT DOCUMENTS

Examiner Initial *	Cite No. 1	Foreign Patent Document Country[3] Code Number[4] Kind Code (if known)[5]	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear	T

Examiner Signature	/YONAS A BAYOU/	Date Considered	03/12/2019

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not Considered. Include copy of this form with next communication to applicant. 1. Applicant's unique citation design number (optional). 2 See Kinds Codes of USPTO patent Documents. at www.uspto.gov or MPEP 901.04. 3. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4. For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 12:09
L2	48771	(G06F21/10).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 12:13
L3	101	(G06F21/10).CPC. and "digital rights management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 12:14
L4	62	(G06F21/10).CPC. and "digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 12:14
L5	0	(G06F21/10).CPC. and "digital rights management key" and @ad<"20140108" and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 12:58
L6	0	body and 4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 12:58
L7	7	"digital rights management key" and @ad<"20140108" and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 12:59
L8	39	(G06F21/10).CPC. and "digital rights	US-PGPUB;	OR	ON	2019/03/12

		management key" and @ad< "20140108" and (scrumb$4 encod$4 encrypt$4 cipher$4)	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			13:07
L9	19	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20130268771" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 14:09
S1	1	14/591952	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:42
S2	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:43
S3	367	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:45
S4	10086	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in. (access$3 with restri$4).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:46
S5	1	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in. and (access$3 with restri$4).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:46
S6	1	"SC Intelligent Holding"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:49
S7	2563	(access$3 near3 (restricted adj (content file document information resource packet video game application app)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2016/06/14 15:55

			IBM_TDB			
S8	2255	(access$3 near3 (restricted adj (content file document information resource packet video game application app))) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:56
S9	127	(access$3 near3 (restricted adj (content file document information resource packet video game application app))) and @ad<"20140108" and (G06F21/10).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:56
S10	5576	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:57
S11	1668	S10 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:58
S12	3	S10 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.) AND S9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:58
S13	113	(access$3 WITH (restricted adj (content file document information resource packet video game application app))).TI. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:59
S14	1	(access$3 WITH (restricted adj (content file document information resource packet video game application app))).TI. and @ad<"20140108" AND S11	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:59
S15	1	"digital rights management keys" with "access restricted content"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 10:54
S16	2	"digital rights management" with "access restricted content"	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2016/09/15 10:56

			EPO; JPO; DERWENT; IBM_TDB			
S17	3	10/265437	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 11:11
S18	16	("5191573" | "5629980" | "5734823" | "5734891" | "5892900" | "5907288" | "5940591" | "6134662" | "6185683" | "6212633" | "6253193" | "6327660" | "6891953" | "6970849").PN. OR ("7865964").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/09/15 11:12
S19	161	"digital rights management keys"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S20	5672	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S21	1744	S20 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S22	0	"digital rights management keys" and S21	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S23	132	"digital rights management keys" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S24	6	"digital rights management keys" and @ad<"20140108" and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:09
S25	17	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20120221853" |	US-PGPUB; USPAT; USOCR;	OR	ON	2016/09/15 17:03

		"20040139315" | "20130174272").PN.	FPRS; EPO; JPO; DERWENT; IBM_TDB			
S26	4	"8495167"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 18:04
S27	1	13/723283	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 18:05
S28	0	15/199481	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/16 15:19
S29	2	14/526360	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/16 15:19
S30	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 11:46
S31	5	"second digital rights management key" and "first digital rights management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:30
S32	4	"second digital rights management key" and "first digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:31
S33	76	"second digital rights management" and "first digital rights management" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:33
S34	5753	726/28.CCLS.	US-PGPUB;	OR	ON	2017/04/05

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			14:34
S35	1819	S34 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:34
S36	0	"second digital rights management" and "first digital rights management" and @ad<"20140108" and S35	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:34
S37	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/26 14:42
S38	5	"20140059156"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/26 14:50
S39	38	("20020069132" | "20040252967" | "20060062363" | "20060069749" | "20070179854" | "20080095370" | "20080119132" | "20080270579" | "20080310815" | "20090254971" | "20090288112" | "20090288131" | "20100138865" | "20100169502" | "20100251305" | "20110047134" | "20110093900" | "20110103374" | "20110177773" | "20110197236" | "20110202383" | "20120042050" | "20120252352" | "20130031211" | "6016520" | "6571279" | "6671424" | "6766376" | "7403618" | "7565399" | "7630986" | "7941092" | "8078096" | "8180276" | "8385813" | "8489673" | "8745158" | "8898708").PN. OR ("9215269").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/06/26 14:50
S40	60	"1189432"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/26 14:52
S41	2	"20120308008"	US-PGPUB; USPAT; USOCR;	OR	ON	2017/06/27 13:15

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S42	5829	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:37
S50	5	"second Digital right management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:39
S51	4	"second Digital right management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:39
S54	3	"second drm key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:44
S55	241	((creat$4 driv$4 generat$4) near3 (drm adj (license key))) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:57
S56	1844	S42 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:58
S57	2	((creat$4 driv$4 generat$4) near3 (drm adj (license key))) and @ad<"20140108" and S56	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:58
S58	85	((creat$4 driv$4 generat$4) near3 ((drm adj (license key "second key")) key "second key") near3 (content information file document)) and @ad<"20140108" and S56	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 14:06
S60	7	from adj content	US-PGPUB;	OR	ON	2017/06/27

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			14:27
S66	5480	(DRM "DIGITAL RIGHT MANAGEMENT").ti. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 14:51
S70	81	(DRM "DIGITAL RIGHT MANAGEMENT").ti. and @ad<"20140108" AND ((creat$4 driv$4 generat$4 COMPUT$4) near3 (drm adj (license key)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 14:53
S73	6	"20080109368"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:46
S74	4	"first digital rights management key" and "second digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:50
S75	0	"first DRM key" and "second DRM key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:51
S76	397	"first DRM" and "second DRM" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:58
S77	0	"first DRM" and "second DRM" and @ad<"20140108" and S56	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:58
S78	7	"20150110035"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2017/06/28 13:28

			IBM_TDB			
S79	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:33
S80	1196	("content protection key" "digital rights management key" "DRM key")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S81	5829	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S82	1844	S81 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S83	0	("content protection key" "digital rights management key" "DRM key") and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S84	988	("content protection key" "digital rights management key" "DRM key") and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:36
S85	107	("content protection key" "digital rights management key" "DRM key") and @ad<"20140108" and ("digital rights management").ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:36
S86	15	("content protection key" "digital rights management key" "DRM key") and @ad<"20140108" and ("digital rights management").ti. and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:37
S87	15	(("content protection key" "digital rights management key" "DRM key") near3 database) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2017/06/28 13:47

			EPO; JPO; DERWENT; IBM_TDB			
S88	106	(("content protection key" "digital rights management key" "DRM key" license) near5 "content database") and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:31
S89	3	"20110314488"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:33
S90	1841	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:58
S91	0	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and (acces$4 with contol$4 with right).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:59
S92	0	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and (acces$4 with contol$4).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:59
S93	0	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:59
S94	68	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and "digital rights management"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 15:00
S95	6	(driv$3 near5 key near5 (file content image video movie information document media)) and @ad<"20140108" and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 15:45
S96	152	((generat$4 comput$4 creat$4 driv$3) near5 key near5 (file content image	US-PGPUB; USPAT;	OR	ON	2017/06/28 15:46

		video movie information document media)) and @ad<"20140108" and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S97	27	((generat$4 comput$4 creat$4 driv$3) near5 key near5 (file content image video movie information document media)) and @ad<"20140108" and S82 and DRM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 15:47
S98	3347	(DRIVE ADJ KEY) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 16:00
S99	1	(DRIVE ADJ KEY) and @ad<"20140108" AND S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 16:01
S100	34	(DRIV$3 ADJ KEY) and @ad<"20140108" AND DRM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 16:02
S101	3461	(from near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:05
S102	0	((key license token certificate) adj from near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:06
S103	14	((key license token certificate) near2 from near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:07
S104	2	(from near2 (content video image media stream file document information message text)) and @ad<"20140108" and ("digital right management" DRM "content protected" "content protection")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:10

S105	686	(from adj (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S106	5829	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S107	1844	S106 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S108	0	(from adj (content video image media stream file document information message text)) and @ad<"20140108" and S107	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S109	246160	((key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:15
S110	291	((key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108" and S107	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:15
S111	38569	((driv$3 generat$4 creat$4 found comput$4 obtain$4 get$4) near2 (key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:17
S112	92	((driv$3 generat$4 creat$4 found comput$4 obtain$4 get$4) near2 (key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108" and S107	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:18
S113	28	"2993604"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2017/06/29 09:20

			DERWENT; IBM_TDB			
S114	50	"617189"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:21
S115	2	"617189p"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:22
S116	3	"20070220610"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:22
S117	14	("20020013772" | "20020038348" | "20020157002" | "20030076955" | "20030196099" | "20040017916" | "20040093523" | "20040107368" | "20050050345" | "20050071663" | "20050102513" | "20050265555" | "6728379" | "7305087").PN. OR ("8875299").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/06/29 09:23
S118	0	("content key").ti. and @ad<"20140108" and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:01
S119	555	("content key").ti. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:01
S120	54	("content key").ti. and @ad<"20140108" and drm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:01
S121	44	(key adj from) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:14
S122	4	"20130073466"	US-PGPUB; USPAT;	OR	ON	2017/06/29 10:24

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S123	188	drive near3 key near3 content	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:30
S124	180	(drive near3 key near3 content) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:30
S125	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:51
S126	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:13
S127	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:13
S128	8	obtain$3 near3 "digital rights management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:14
S129	3	obtain$3 near5 "digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:14
S130	10	"20100114730"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:17

S131	1	10/099931	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:36
S132	1	11/254315	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:43
S133	1	11/255692	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:55
S134	1	11/159754	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:58
S135	1	12/425490	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:04
S136	5	"8290427"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:10
S137	4	12/265732	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:11
S138	1	13/333894	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:15
S139	19	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20130268771" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2017/06/29 14:25

			DERWENT; IBM_TDB			
S140	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:20
S141	17	("20040030650" | "20080263356" | "20090052671" | "20120066754" | "20120303974" | "6205550" | "6609199" | "6832319" | "7024393" | "7155616" | "7215771" | "7356143" | "7467304" | "7594275" | "7925894").PN. OR ("8831217").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/12/01 11:20
S142	40	"2013/0268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:21
S143	0	2012/0308008	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:21
S144	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:22
S145	19	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20130268771" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 13:33
S146	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/07 09:39
S147	17	("20040030650" | "20080263356" | "20090052671" | "20120066754" | "20120303974" | "6205550" | "6609199" | "6832319" | "7024393" | "7155616" | "7215771" | "7356143" | "7467304" | "7594275" | "7925894").PN. OR ("8831217").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/08/07 09:40
S148	2	"20120308008"	US-PGPUB; USPAT; USOCR;	OR	ON	2018/08/07 09:40

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S149	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/10 14:08
S150	1	15/448796	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/13 09:51
S151	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/13 11:35
S152	19	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20130268771" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/13 14:18

EAST Search History (Interference)

< This search history is empty>

3/ 12/ 2019 2:16:19 PM
C:\ Users\ ybayou\ Documents\ EAST\ Workspaces\ 14591952.wsp

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 14/591,952 Confirmation No. : 5164
First Named Inventor : Lauri Valjakka
Filing Date : 01/08/2015
TC/AU : 2434
Examiner : Bayou, Yonas A

Attorney Docket No. : SCIH 2 US

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO NON-FINAL OFFICE ACTION

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 5 of this paper.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1 – 5. (Cancelled)

6. (Currently amended) An apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to:
   - obtain an access restricted content from at least one of a content database and a content providing server;
   - obtain a first digital rights management key from the content database, wherein the obtaining is based at least in part on a query, the query comprising the content identifier and an identifier associated with the user;
   - using the first digital rights management key, obtain a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key,
   - cause the content providing server to validate the fingerprint, and, if the validation is successful, access the access restricted content and
   - derive a second and third digital rights management key from the access restricted content using the digital rights management header of the access restricted content

   wherein the second and third digital rights management keys are applied to retrieve the payload of the access restricted content and wherein at least one of the second or third digital rights management key is used to encrypt the other key of the second or third digital rights management key

   wherein the content is usable without being in an unprotected state.

7. (Cancelled).

8. (Previously Presented) The apparatus according to claim 6, wherein the apparatus is caused to obtain the first digital rights management key either by receiving it from a server or by generating it at least in part from at least one of environmental parameters and parameters of the access restricted content.

9. (Currently amended) A method, comprising:
   - obtaining an access restricted content from at least one of a content database and a content providing server;
   - obtaining a first digital rights management key from a content database, wherein the obtaining is based at least in part on a query, the query comprising the content identifier and an identifier associated with the user;
   - deriving, using the first digital rights management key, from the access restricted content a fingerprint of the access restricted content wherein the obtaining is based at least in part on the first digital rights management key,
   - causing the content providing server to validate the fingerprint, and, if the validation is successful, accessing the access restricted content and
   - information describing encryption properties of the access restricted content, and
   - deriving, using the digital rights management header of the access restricted content, from the access restricted content a second and third digital rights management key,

     wherein the second and third digital rights management keys are applied to retrieve the payload of the access restricted content and wherein at least one of the second or third digital rights management key is used to encrypt the other key of the second or third digital rights management key,

     wherein the content is usable without being in an unprotected state.

10. (Previously presented). The apparatus of claim 6, wherein the first digital rights management key is unique to a specific session.

11. (Previously presented) The apparatus of claim 6, wherein the access restricted content comprises a first layer that is decryptable using the first digital rights management key, the first layer comprising information on which key may be used to obtain fuller access to the access restricted content.

12. (Previously presented) The method of claim 9, wherein the first digital rights management key is unique to a specific session.

13. (Previously presented) The apparatus of claim 6, wherein the first, second and third digital rights management keys are each encrypted with 256 bit AES encryption.

14. (Previously presented) The apparatus of claim 6, wherein at least one of the content database and the content providing server comprise a content registration module, wherein said content registration module registers the usage of the content on the content database with respect to the user identifier and the content identifier.

15. (Currently amended) The apparatus of claim ~~14~~ 6, wherein said status content usage includes the calculated time period associated with the user identifier and the content identifier.

16. (Cancelled)

17. (Previously presented) The apparatus of claim 6, wherein the apparatus retrieves the first digital rights management key from at least one of the content database and the content providing server when required.

18. (Previously presented) The apparatus of claim 6, wherein the apparatus generates the first digital rights management key when required, the generation being based on environment and media parameters.

REMARKS/ARGUMENTS

Claims 6, 8–15 and 17–18 are pending. Claim 16 has been cancelled herein. Claims 6 and 9 have been amended herein to incorporate the limitations of previous claim 16. Claim 15 has been amended herein to correct an issue with the dependency of the claim. ***No new matter has been added.***

Regarding the Indication of Allowable Subject Matter

Applicant thanks the Examiner for the indication of Allowable Subject Matter. As indicated in the outstanding Office Action, claims 15 and 16 would be allowable if rewritten in independent form. In view of the Examiner's statement on why the claims are allowable, Applicant has amended independent claims 6 and 9 to recite the limitation of claim 16.

CONCLUSION

The Applicant believes that that present application is in condition for allowance. Notice of the same is earnestly solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Toimi Teelahti, Reg. No. 76127 at (571) 335-7960, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Respectfully submitted,

/ Toimi T. Teelahti Reg. No. 76127/

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2019-06-19

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	:	14/591,952
Applicant	:	IPRA Technologies Ltd Oy
Filed	:	2015-01-08
TC/AU	:	2434
Examiner	:	BAYOU, Yonas A.
Attorney Docket No.	:	SCIH 2 US

M/S Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

☒ The patents, publications, or other information submitted for consideration by the Office are listed on the PTO-SB08(s) attached hereto.

II. COPIES OF CITED DOCUMENTS

☒ Copies of all of the foreign patent documents and non-patent literature are included.

☐ Copies of all of the foreign patent documents and non-patent literature are included except for the following for the corresponding indicated reasons:

III. CONCISE EXPLANATION OF THE RELEVANCE

☒ For Documents in the English language listed on the attached PTO-SB08(s) it is believed that no statement of relevancy is required.

☒ The following foreign language documents correspond to the indicated English language documents:

Foreign language document	Corresponding English language document
JP2003218851	EP1326157
JP2009507433	WO2007028099

Therefore, it is believed that this in conjunction with the indicated English language documents satisfies the relevancy requirement.

☐ An English language version of a search report or action that indicates the degree of relevance found by the foreign office is attached, it is believed that this satisfies the requirement for a concise explanation of the corresponding documents. See MPEP 609(III)(A)(3).

☐ A concise explanation of foreign language documents not covered by an indication above is as follows:

* 0 Additional page(s) of explanation are attached.

IV. STATEMENT UNDER 37 CFR 1.97(e)

☒ I hereby state that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this statement.

☐ I hereby state that no item of information in the Information Disclosure Statement filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, no item of information contained in this information Disclosure Statement was known to any individual designated in 37 CFR 1.56(c) more than 3 months prior to the filing of this information Disclosure Statement.

* When no box has been checked in this section then no statement is being made.

V. FEES

☐ This Information Disclosure Statement is being filed concurrently with the filing of a new patent application or RCE, therefore no fee is required.

☐ This Information Disclosure Statement is being filed within three months of the date of entry of the national stage as set forth in §1.491 in an international application (37 C.F.R. §1.97(b)(2)), within three months from the filing of a national application or before the mailing date of a first Office action on the merits in an RCE, national application or national stage entry of an international application, therefore no fee is required.

☒ This Information Disclosure Statement is being filed before the mailing date of a Final Office Action under 37 C.F.R. §1.113 or before the mailing date of a Notice of Allowance under 37 C.F.R. §1.311.

☐ a fee as required by 37 C.F.R. §1.17(p) is attached.

☒ a statement in accordance with 37 CFR 1.97(e) as indicated above is attached.

☐ This Information Disclosure Statement is being filed on or after the mailing date of a Final Office Action under 37 C.F.R. §1.113 or a Notice of Allowance under 37 C.F.R. §1.311 but before or simultaneously with the payment of an issue fee.

☐ [a fee as required by 37 C.F.R. §1.17(p) and a statement in accordance with 37 CFR 1.97(e) as indicated above is attached.

If the Examiner has any questions concerning this Information Disclosure statement they are requested to contact the undersigned. If it is determined that this Information Disclosure Statement has been filed under the wrong rule, the Office is requested to consider this statement under the proper rule.

Respectfully submitted,

/ Toimi T. Teelahti Reg. No.76127 /

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June 19, 2019

PTO/SB/08a (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 1

Complete if Known	
Application Number	14/591,952
Filing Date	January 08, 2015
First Named Inventor	VALJAKKA, Lauri
Art Unit	2434
Examiner Name	BAYOU, Yonas A.
Attorney Docket Number	SCIH 2 US

U.S. PATENT DOCUMENTS

Examiner initial *	Cite No.	Document Number Number - Kind Code [2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear

FOREIGN PATENT DOCUMENTS

Examiner Initial *	Cite No. 1	Foreign Patent Document Country Code [3] Number [4] Kind Code (if known) [5]	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	1	EP 1326157 - A2	07-09-2003	PERVASIVE SECURITY SYSTE		
	2	JP 2003218851 - A	07-31-2003	PERVASIVE SECURITY SYSTE		
	3	JP 2009507433 - A	02-19-2009	QUALCOMM INCORPORATED		
	4	JP 2011013714 - A	01-20-2011	VICTOR COMPANY OF JAPAN		
	5	WO WO2007028099 - A2	03-08-2007	QUALCOMM INCORPORATED		

Examiner Signature		Date Considered	

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not Considered. Include copy of this form with next communication to applicant. 1. Applicant´s unique citation design number (optional). 2 See Kinds Codes of USPTO patent Documents. at www.uspto.gov or MPEP 901.04. 3. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4. For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Electronic Acknowledgement Receipt

EFS ID:	36341434
Application Number:	14591952
International Application Number:	
Confirmation Number:	5164
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Customer Number:	95002
Filer:	Toimi Teemu Teelahti/Ross Worrell
Filer Authorized By:	Toimi Teemu Teelahti
Attorney Docket Number:	SCIH 2 US
Receipt Date:	19-JUN-2019
Filing Date:	08-JAN-2015
Time Stamp:	10:27:35
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		SCIH2US_2019-06-19_Amendment.pdf	118525 2cb6a620242c3292659752c6aa7dc0737338bb56	yes	5

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	4
	Applicant Arguments/Remarks Made in an Amendment	5	5

Warnings:					
Information:					
2	Transmittal Letter	SCIH2US_2019-06-19_IDS_transmittal.pdf	237589 fb3805151d6a02be2fa6a97e5a46a36871363d04	no	4
Warnings:					
Information:					
3	Information Disclosure Statement (IDS) Form (SB08)	SCIH2US_2019-06-19_IDS_form.pdf	75712 bd7394cc2eea2c8faf3c5749be330b096c194563	no	1
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
4	Foreign Reference	EP1326157A2.pdf	1356078 921ee7d57a4790507a0a3bc44339bcf738f24873	no	23
Warnings:					
Information:					
5	Foreign Reference	JP2003218851.pdf	3979499 8d1082da97ed66619d5a9b7188f729a4e732a4b1	no	23
Warnings:					
Information:					
6	Foreign Reference	JP2009507433.pdf	4667694 4e5b00d3c7d1110c0943ed8b3d0f9527bb130846	no	34
Warnings:					
Information:					

7	Foreign Reference	JP2011013714.pdf	14963647 462da61149f5e283d8a3070d36c618f59a147cda	no	127
Warnings:					
Information:					
8	Foreign Reference	WO2007028099A2.pdf	2278592 b1913caf5b08a690ac3bd2726285e520aa5d36d6	no	53
Warnings:					
Information:					
		Total Files Size (in bytes):	27677336		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/591,952	Filing Date 01/08/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☑ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $40 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $210 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT	06/19/2019	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 11	Minus	** 20	= 0		x $50 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	*** 3	= 0		x $230 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	0

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $0 =	
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.	LIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	/PEGGY S YARBOROUGH/
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PLUS Search Results for S/N 14591952, Searched Tue Aug 06 08:43:52 EDT 2019

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

6279111 99
6311176 99
6760042 99
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7036011 99
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7562397 99
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7917946 99
7978848 99
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20020002674 99
20020033842 99
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20020099952 99

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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NOTICE OF ALLOWANCE AND FEE(S) DUE

95002 7590 08/14/2019

Seppo Laine Oy
PO Box 339
Helsinki, FI-00181
FINLAND

EXAMINER
BAYOU, YONAS A

ART UNIT	PAPER NUMBER
2434	

DATE MAILED: 08/14/2019

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/591,952	01/08/2015	Lauri Valjakka	SCIH 2 US	5164

TITLE OF INVENTION: Method of and system for providing access to access restricted content to a user

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$500	$0.00	$0.00	$500	11/14/2019

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

95002 7590 08/14/2019

Seppo Laine Oy
PO Box 339
Helsinki, FI-00181
FINLAND

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/591,952	01/08/2015	Lauri Valjakka	SCIH 2 US	5164

TITLE OF INVENTION: Method of and system for providing access to access restricted content to a user

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$500	$0.00	$0.00	$500	11/14/2019

EXAMINER	ART UNIT	CLASS-SUBCLASS
BAYOU, YONAS A	2434	726-028000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. Fees submitted: ❑ Issue Fee ❑ Publication Fee (if required) ❑ Advance Order - # of Copies _____

4b. Method of Payment: *(Please first reapply any previously paid fee shown above)*

❑ Electronic Payment via EFS-Web ❑ Enclosed check ❑ Non-electronic payment by credit card (Attach form PTO-2038)

❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. **Change in Entity Status** (from status indicated above)

❑ Applicant certifying micro entity status. See 37 CFR 1.29

❑ Applicant asserting small entity status. See 37 CFR 1.27

❑ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office
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BAYOU, YONAS A	
ART UNIT	PAPER NUMBER
2434	

DATE MAILED: 08/14/2019

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 14/591,952	Applicant(s) Valjakka et al.	
	Examiner YONAS A BAYOU	Art Unit 2434	AIA (FITF) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☑ This communication is responsive to 06/19/2019.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

3. ☑ The allowed claim(s) is/are 6,8-15 and 17-18 . As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information , please see **http://www.uspto.gov/patents/init_events/pph/index.jsp** or send an inquiry to **PPHfeedback@uspto.gov.**

4. ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☑ None of the:

   1. ☑ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file areply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☑ Notice of References Cited (PTO-892)
2. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 06/19/2019.
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material _____.
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date. _____.
5. ☐ Examiner's Amendment/Comment
6. ☑ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/YONAS A BAYOU/
Primary Examiner, Art Unit 2434

DETAILED ACTION

1. This office action is in response to Applicant Arguments/Remarks filed on 06/19/2019.

2. As per instant amendments, claims 1-5, 7 and 16 have been cancelled, claims 6, 9 and 15 have been amended; claims 6 and 9 are independent claims. Claims 6, 8-15 and 17-18 have been examined and are pending.

3. Applicant's arguments filed on 06/19/2019 have been fully considered and they are persuasive. Therefore the rejections of claims have been withdrawn.

4. According to MPEP 1302.14 (I): "In most cases, the examiner's actions and the applicant's replies make evident the reasons for allowance, satisfying the "record as a whole" proviso of the rule. This is particularly true when applicant fully complies with 37 CFR 1.111 (b) and (c) and 37 CFR 1.133(b). Thus, where the examiner's actions clearly point out the reasons for rejection and the applicant's reply explicitly presents reasons why claims are patentable over the reference, the reasons for allowance are in all probability evident from the record and no statement should be necessary."

Notice of Pre-AIA or AIA Status

5. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Allowable Subject Matter

6. Claims 6, 8-15 and 17-18 are allowed.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YONAS A BAYOU whose telephone number is (571)272-7610. The examiner can normally be reached on Monday-Friday 7AM-4PM.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571-272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YONAS A BAYOU/
Primary Examiner, Art Unit 2434
08/06/2019

Notice of References Cited	Application/Control No. 14/591,952	Applicant(s)/Patent Under Reexamination Valjakka et al.	
	Examiner YONAS A BAYOU	Art Unit 2434	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20130268771-A1	10-2013	BLANKENBECKLER; David L.	H04L9/0866	713/189
*	B	US-20100268649-A1	10-2010	Roos; Johan	G06F21/10	705/50
*	C	US-20120308008-A1	12-2012	Kondareddy; Ragu (Raghunatha)	H04L63/0471	380/273
*	D	US-20090254751-A1	10-2009	Fujiwara; Kazunari	H04L9/12	713/171
*	E	US-20030210789-A1	11-2003	Farnham, Timothy David	H04L9/0844	380/270
*	F	US-20100275023-A1	10-2010	FUJIWARA; Yoshinobu	H04N21/239	713/171
*	G	US-20030172278-A1	09-2003	Farnham, Timothy David	H04L63/0435	713/176
*	H	US-20120144200-A1	06-2012	Liu; Xianhong	H04L9/0844	713/171
*	I	US-20130325994-A1	12-2013	Chai; Hongfeng	H04L67/1097	709/208
*	J	US-20160374133-A1	12-2016	Logue; Jay D.	H04W8/005	1/1
*	K	US-20140281576-A1	09-2014	SUZUKI; Koji	G06F12/1408	713/189
*	L	US-20150229473-A1	08-2015	Klein; Philippe	H04L9/0841	713/171
*	M	US-20100211779-A1	08-2010	Sundaram; Ganapathy S.	H04L9/0847	713/168

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/591,952	Valjakka et al.
	Examiner	Art Unit
	YONAS A BAYOU	2434

CPC - Searched*		
Symbol	Date	Examiner
G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102	9/15/2016	

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102	9/15/2016	yb
East Search (such as Inventor's and Assignee's Name Search, CPC, Keywords), Inventor Search and Reviewed related Cases.	9/15/2016	yb
Search is updated	12/1/2017	yb
Search is updated	08/13/2018	yb
Search is updated	03/12/2019	yb
Search is updated	08/05/2019	yb

/YONAS BAYOU/ Primary Examiner.Art Unit 2434	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/591,952	Valjakka et al.
	Examiner	Art Unit
	YONAS A BAYOU	2434

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
G06F	21/6245	08/05/2019	yb
G06F	21/6218	08/05/2019	yb
G06F	21/6209	08/05/2019	yb
G06F	21/62	08/05/2019	yb
H04L	63/102	08/05/2019	yb

/YONAS BAYOU/ Primary Examiner.Art Unit 2434	

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/591,952	Valjakka et al.
	Examiner	**Art Unit**
	YONAS A BAYOU	2434

CPC								
Symbol							**Type**	**Version**
G06F	/	21	/	10			F	2013-01-01

CPC Combination Sets									
Symbol							**Type**	**Set**	**Ranking**	**Version**
	/		/							

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	11	
/YONAS A BAYOU/ Primary Examiner, Art Unit 2434	05 August 2019	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

U.S. Patent and Trademark Office — Part of Paper No.: 20190805

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/591,952	Valjakka et al.
	Examiner	**Art Unit**
	YONAS A BAYOU	2434

INTERNATIONAL CLASSIFICATION				
CLAIMED				
G06F	/	21	/	10

NON-CLAIMED				
	/		/	

US ORIGINAL CLASSIFICATION	
CLASS	**SUBCLASS**

CROSS REFERENCES(S)						
CLASS	**SUBCLASS (ONE SUBCLASS PER BLOCK)**					

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	11	
/YONAS A BAYOU/ Primary Examiner, Art Unit 2434	05 August 2019	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

U.S. Patent and Trademark Office — Part of Paper No.: 20190805

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/591,952	Valjakka et al.
	Examiner	**Art Unit**
	YONAS A BAYOU	2434

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIMS

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1	3	10												
	2	4	11												
	3	11	12												
	4	5	13												
	5	6	14												
1	6	7	15												
	7		16												
2	8	8	17												
10	9	9	18												

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	11	
/YONAS A BAYOU/ Primary Examiner, Art Unit 2434	05 August 2019	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

PTO/SB/08a (07-09)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 1

Complete if Known	
Application Number	14/591,952
Filing Date	January 08, 2015
First Named Inventor	VALJAKKA, Lauri
Art Unit	2434
Examiner Name	BAYOU, Yonas A.
Attorney Docket Number	SCIH 2 US

U.S. PATENT DOCUMENTS

Examiner initial *	Cite No.	Document Number Number - Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear

FOREIGN PATENT DOCUMENTS

Examiner Initial *	Cite No. 1	Foreign Patent Document Country[3] Code	Number[4]	Kind Code (if known)[5]	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	1	EP	1326157	A2	07-09-2003	PERVASIVE SECURITY SYSTE		
	2	JP	2003218851	A	07-31-2003	PERVASIVE SECURITY SYSTE		
	3	JP	2009507433	A	02-19-2009	QUALCOMM INCORPORATED		
	4	JP	2011013714	A	01-20-2011	VICTOR COMPANY OF JAPAN		
	5	WO	WO2007028099	A2	03-08-2007	QUALCOMM INCORPORATED		

Examiner Signature	/YONAS A BAYOU/	Date Considered	08/05/2019

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14591952

PLUS Search Results for S/N 14591952 Searched Aug 06, 2019.

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	14/591952	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:42
S2	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:43
S3	367	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:45
S4	10086	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in. (access$3 with restri$4).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:46
S5	1	((Valjakka near Lauri)(Jussila near "Jukka-Pekka")(Tapio near Jari)).in. and (access$3 with restri$4).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:46
S6	1	"SC Intelligent Holding"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:49
S7	2563	(access$3 near3 (restricted adj (content file document information resource packet video game application app)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:55
S8	2255	(access$3 near3 (restricted adj (content	US-PGPUB;	OR	ON	2016/06/14

		file document information resource packet video game application app))) and @ad<"20140108"	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			15:56
S9	127	(access$3 near3 (restricted adj (content file document information resource packet video game application app))) and @ad<"20140108" and (G06F21/10).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:56
S10	5576	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:57
S11	1668	S10 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:58
S12	3	S10 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.) AND S9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:58
S13	113	(access$3 WITH (restricted adj (content file document information resource packet video game application app))).TI. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:59
S14	1	(access$3 WITH (restricted adj (content file document information resource packet video game application app))).TI. and @ad<"20140108" AND S11	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/06/14 15:59
S15	1	"digital rights management keys" with "access restricted content"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 10:54
S16	2	"digital rights management" with "access restricted content"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2016/09/15 10:56

			IBM_TDB			
S17	3	10/265437	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 11:11
S18	16	("5191573" | "5629980" | "5734823" | "5734891" | "5892900" | "5907288" | "5940591" | "6134662" | "6185683" | "6212633" | "6253193" | "6327660" | "6891953" | "6970849").PN. OR ("7865964").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/09/15 11:12
S19	161	"digital rights management keys"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S20	5672	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S21	1744	S20 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S22	0	"digital rights management keys" and S21	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S23	132	"digital rights management keys" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:07
S24	6	"digital rights management keys" and @ad<"20140108" and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 12:09
S25	17	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2016/09/15 17:03

			DERWENT; IBM_TDB			
S26	4	"8495167"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 18:04
S27	1	13/723283	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/15 18:05
S28	0	15/199481	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/16 15:19
S29	2	14/526360	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/09/16 15:19
S30	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 11:46
S31	5	"second digital rights management key" and "first digital rights management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:30
S32	4	"second digital rights management key" and "first digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:31
S33	76	"second digital rights management" and "first digital rights management" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:33
S34	5753	726/28.CCLS.	US-PGPUB; USPAT; USOCR;	OR	ON	2017/04/05 14:34

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S35	1819	S34 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:34
S36	0	"second digital rights management" and "first digital rights management" and @ad<"20140108" and S35	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/04/05 14:34
S37	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/26 14:42
S38	5	"20140059156"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/26 14:50
S39	38	("20020069132" | "20040252967" | "20060062363" | "20060069749" | "20070179854" | "20080095370" | "20080119132" | "20080270579" | "20080310815" | "20090254971" | "20090288112" | "20090288131" | "20100138865" | "20100169502" | "20100251305" | "20110047134" | "20110093900" | "20110103374" | "20110177773" | "20110197236" | "20110202383" | "20120042050" | "20120252352" | "20130031211" | "6016520" | "6571279" | "6671424" | "6766376" | "7403618" | "7565399" | "7630986" | "7941092" | "8078096" | "8180276" | "8385813" | "8489673" | "8745158" | "8898708").PN. OR ("9215269").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/06/26 14:50
S40	60	"1189432"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/26 14:52
S41	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2017/06/27 13:15

			DERWENT; IBM_TDB			
S42	5829	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:37
S50	5	"second Digital right management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:39
S51	4	"second Digital right management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:39
S54	3	"second drm key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:44
S55	241	((creat$4 driv$4 generat$4) near3 (drm adj (license key))) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:57
S56	1844	S42 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:58
S57	2	((creat$4 driv$4 generat$4) near3 (drm adj (license key))) and @ad<"20140108" and S56	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 13:58
S58	85	((creat$4 driv$4 generat$4) near3 ((drm adj (license key "second key")) key "second key") near3 (content information file document)) and @ad<"20140108" and S56	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 14:06
S60	7	from adj content	US-PGPUB; USPAT; USOCR;	OR	ON	2017/06/27 14:27

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S66	5480	(DRM "DIGITAL RIGHT MANAGEMENT").ti. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 14:51
S70	81	(DRM "DIGITAL RIGHT MANAGEMENT").ti. and @ad<"20140108" AND ((creat$4 driv$4 generat$4 COMPUT$4) near3 (drm adj (license key)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 14:53
S73	6	"20080109368"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:46
S74	4	"first digital rights management key" and "second digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:50
S75	0	"first DRM key" and "second DRM key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:51
S76	397	"first DRM" and "second DRM" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:58
S77	0	"first DRM" and "second DRM" and @ad<"20140108" and S56	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/27 15:58
S78	7	"20150110035"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:28
S79	2	"20120308008"	US-PGPUB;	OR	ON	2017/06/28

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			13:33
S80	1196	("content protection key" "digital rights management key" "DRM key")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S81	5829	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S82	1844	S81 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S83	0	("content protection key" "digital rights management key" "DRM key") and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:35
S84	988	("content protection key" "digital rights management key" "DRM key") and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:36
S85	107	("content protection key" "digital rights management key" "DRM key") and @ad<"20140108" and ("digital rights management").ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:36
S86	15	("content protection key" "digital rights management key" "DRM key") and @ad<"20140108" and ("digital rights management").ti. and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 13:37
S87	15	(("content protection key" "digital rights management key" "DRM key") near3 database) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2017/06/28 13:47

			IBM_TDB			
S88	106	(("content protection key" "digital rights management key" "DRM key" license) near5 "content database") and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:31
S89	3	"20110314488"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:33
S90	1841	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:58
S91	0	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and (acces$4 with contol$4 with right).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:59
S92	0	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and (acces$4 with contol$4).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:59
S93	0	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 14:59
S94	68	(driv$3 near3 key near3 (file content image video movie information document media)) and @ad<"20140108" and "digital rights management"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 15:00
S95	6	(driv$3 near5 key near5 (file content image video movie information document media)) and @ad<"20140108" and S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 15:45
S96	152	((generat$4 comput$4 creat$4 driv$3) near5 key near5 (file content image video movie information document media)) and @ad<"20140108" and	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2017/06/28 15:46

		S82	EPO; JPO; DERWENT; IBM_TDB			
S97	27	((generat$4 comput$4 creat$4 driv$3) near5 key near5 (file content image video movie information document media)) and @ad<"20140108" and S82 and DRM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 15:47
S98	3347	(DRIVE ADJ KEY) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 16:00
S99	1	(DRIVE ADJ KEY) and @ad<"20140108" AND S82	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 16:01
S100	34	(DRIV$3 ADJ KEY) and @ad<"20140108" AND DRM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/28 16:02
S101	3461	(from near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:05
S102	0	((key license token certificate) adj from near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:06
S103	14	((key license token certificate) near2 from near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:07
S104	2	(from near2 (content video image media stream file document information message text)) and @ad<"20140108" and ("digital right management" DRM "content protected" "content protection")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:10
S105	686	(from adj (content video image media stream file document information	US-PGPUB; USPAT;	OR	ON	2017/06/29 07:12

		message text)) and @ad<"20140108"	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S106	5829	726/28.CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S107	1844	S106 AND ((G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S108	0	(from adj (content video image media stream file document information message text)) and @ad<"20140108" and S107	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:12
S109	246160	((key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:15
S110	291	((key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108" and S107	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:15
S111	38569	((driv$3 generat$4 creat$4 found comput$4 obtain$4 get$4) near2 (key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:17
S112	92	((driv$3 generat$4 creat$4 found comput$4 obtain$4 get$4) near2 (key "drm key" drm) near2 (content video image media stream file document information message text)) and @ad<"20140108" and S107	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 07:18
S113	28	"2993604"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:20

S114	50	"617189"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:21
S115	2	"617189p"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:22
S116	3	"20070220610"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 09:22
S117	14	("20020013772" | "20020038348" | "20020157002" | "20030076955" | "20030196099" | "20040017916" | "20040093523" | "20040107368" | "20050050345" | "20050071663" | "20050102513" | "20050265555" | "6728379" | "7305087").PN. OR ("8875299").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/06/29 09:23
S118	0	("content key").ti. and @ad<"20140108" and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:01
S119	555	("content key").ti. and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:01
S120	54	("content key").ti. and @ad<"20140108" and drm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:01
S121	44	(key adj from) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:14
S122	4	"20130073466"	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2017/06/29 10:24

			EPO; JPO; DERWENT; IBM_TDB			
S123	188	drive near3 key near3 content	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:30
S124	180	(drive near3 key near3 content) and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:30
S125	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 10:51
S126	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:13
S127	2	"20150193601"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:13
S128	8	obtain$3 near3 "digital rights management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:14
S129	3	obtain$3 near5 "digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:14
S130	10	"20100114730"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:17
S131	1	10/099931	US-PGPUB; USPAT;	OR	ON	2017/06/29 11:36

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S132	1	11/254315	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:43
S133	1	11/255692	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:55
S134	1	11/159754	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 11:58
S135	1	12/425490	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:04
S136	5	"8290427"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:10
S137	4	12/265732	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:11
S138	1	13/333894	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 12:15
S139	19	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20130268771" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/06/29 14:25

S140	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:20
S141	17	("20040030650" | "20080263356" | "20090052671" | "20120066754" | "20120303974" | "6205550" | "6609199" | "6832319" | "7024393" | "7155616" | "7215771" | "7356143" | "7467304" | "7594275" | "7925894").PN. OR ("8831217").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/12/01 11:20
S142	40	"2013/0268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:21
S143	0	2012/0308008	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:21
S144	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 11:22
S145	19	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20130268771" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/12/01 13:33
S146	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/07 09:39
S147	17	("20040030650" | "20080263356" | "20090052671" | "20120066754" | "20120303974" | "6205550" | "6609199" | "6832319" | "7024393" | "7155616" | "7215771" | "7356143" | "7467304" | "7594275" | "7925894").PN. OR ("8831217").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/08/07 09:40
S148	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2018/08/07 09:40

			DERWENT; IBM_TDB			
S149	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/10 14:08
S150	1	15/448796	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/13 09:51
S151	2	"20120308008"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/13 11:35
S152	19	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20130268771" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/08/13 14:18
S153	3	"20130268771"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 12:09
S154	48771	(G06F21/10).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 12:13
S155	101	(G06F21/10).CPC. and "digital rights management key"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 12:14
S156	62	(G06F21/10).CPC. and "digital rights management key" and @ad<"20140108"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 12:14
S157	0	(G06F21/10).CPC. and "digital rights management key" and @ad<"20140108" and payload	US-PGPUB; USPAT; USOCR;	OR	ON	2019/03/12 12:58

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S158	0	body and S156	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 12:58
S159	7	"digital rights management key" and @ad<"20140108" and payload	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 12:59
S160	39	(G06F21/10).CPC. and "digital rights management key" and @ad<"20140108" and (scrumb$4 encod$4 encrypt$4 cipher$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 13:07
S161	19	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100250388" | "20130268771" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/03/12 14:09
S162	21	("20120308008" | "20050039034" | "20050273629" | "8184811" | "20100268649" | "20130268771" | "20100250388" | "20130268771" | "20120221853" | "20040139315" | "20130174272").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2019/08/05 16:50

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	40142	(G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC.	US-PGPUB; USPAT	OR	ON	2019/08/06 12:07
L2	0	(G06F21/6245 OR G06F21/6218 OR G06F21/6209 OR G06F21/62 OR H04L63/102).CPC. and (content with usable with unprotected with state).clm.	US-PGPUB; USPAT	OR	ON	2019/08/06 12:09

8/6/2019 12:09:46 PM
C:\Users\ybayou\Documents\EAST\Workspaces\14591952.wsp

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	: 14/591,952	Confirmation No. : 5164
First Named Inventor	: Lauri Valjakka	
Filing Date	: 01/08/2015	
TC/AU	: 2434	
Examiner	: Bayou, Yonas A	

Attorney Docket No. : SCIH 2 US

Mail Stop Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PETITION TO ACCEPT A DELAYED CERTIFIED COPY OF THE PRIORITY DOCUMENT UNDER 37 C.F.R. 1.55(f)

The certified copy of the priority document was inadvertently not submitted to the USPTO before now because a request to make the priority document available was not received at the PRH (Finnish Patent Office). As a result, the certified copy of said document could not be provided to the USPTO.

Therefore, as provided by 37 C.F.R. 1.55(f), this petition is being filed and accompanied by:

(1) The certified copy of the foreign application in the form of the SB/38 form with the appropriate DAS code,

(2) The petition fee as set forth in § 1.17(g),

(3) This statement comprising good and sufficient cause for the delay of submitting the certified copy of the priority document.

Respectfully submitted,

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2019-11-13

PTO/SB/38 (12-18)
Approved for use through 12/31/2021. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Request to Retrieve Electronic Priority Application(s)

Send completed form to: Commissioner for Patents
P.O. Box 1450, Alexandria, VA 22313-1450

COMPLETE IF KNOWN	
Application Number	14/591,952
Filing Date	2015-01-08
First Named Inventor	VALJAKKA, Lauri
Art Unit	2434
Examiner Name	BAYOU, Yonas A
Attorney Docket Number	SCIH 2 US

Pursuant to 37 CFR 1.55(i), the undersigned hereby requests that the USPTO retrieve an electronic copy of each of the following foreign applications for which priority has been claimed under 35 U.S.C. 119(a)-(d) from a foreign intellectual property office participating with the USPTO in a bilateral or multilateral priority document exchange agreement. This Request must be submitted:

- within the later of sixteen months from the filing date of the prior foreign application or four months from the actual filing date of an application under 35 U.S.C. 111(a),
- within four months from the later of the date of commencement (37 CFR 1.491(a)) or the date of the initial submission under 35 U.S.C. 371 of an application entering the national stage under 35 U.S.C. 371, or
- with a petition under 37 CFR 1.55(e) or (f).

☐ **OPTION A**

Please retrieve the priority application identified in Column C, a certified copy of which is contained in the EP or JP application identified in Columns A and B:

	A	B			C	
	Code for Participating Office (EP or JP only)	Application containing the non-participating priority application			Non-participating priority application to be retrieved	
		App. No.	Filing Date	Access Code (for JP only)	Country Code	App. No.
1						

■ **OPTION B**

This Request may be used for the infrequent circumstance when a claim for priority to an application filed in a participating foreign intellectual property office was made prior to that foreign intellectual property office becoming a participating foreign intellectual property office.

Please retrieve the priority application identified in Columns A and B:

	A	B		
	Code for Participating Office (e.g., EP) or WIPO DAS Depositing Office (e.g., AU, BR, CN, DK, EA, EE, ES, FI, GB, IB, IN, JP, KR, MA, NL, NZ, SE)	Application to be retrieved		
		App. No.	Filing Date	Access Code (for WIPO DAS Depositing Office)
1	FI	20145013	2014-01-08	0A34
2				

The USPTO will not attempt to retrieve the identified priority application(s) unless an identical claim for foreign priority to the application identified above is made pursuant to 37 CFR 1.55(d) or a petition is granted under 37 CFR 1.55(e) or (f). Applicants are advised to consult Private PAIR (accessed through www.uspto.gov) to assure that the retrieval has been successful. The applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period set forth in 37 CFR 1.55(g)(1).

I hereby declare that I have the authority to grant access to the above-identified foreign application(s).

/Toimi Teelahti Reg. No. 76127/	2019-11-13
Signature	Date
Toimi Teelahti	571-335-7960
Printed or Typed Name	Telephone Number
U.S. Patent Agent	76127
Title	Registration Number, if applicable

This collection of information is required by 37 CFR 1.55(d). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 8 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	14591952
Filing Date:	08-Jan-2015
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Filer:	Toimi Teemu Teelahti
Attorney Docket Number:	SCIH 2 US

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
PETITION FEE- 37 CFR 1.17(G) (GROUP II)	1463	1	200	200
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**200**

Electronic Acknowledgement Receipt

EFS ID:	37735451
Application Number:	14591952
International Application Number:	
Confirmation Number:	5164
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Customer Number:	95002
Filer:	Toimi Teemu Teelahti
Filer Authorized By:	
Attorney Docket Number:	SCIH 2 US
Receipt Date:	13-NOV-2019
Filing Date:	08-JAN-2015
Time Stamp:	10:48:11
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$200
RAM confirmation Number	E2019ACA49148571
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Petition for review by the Office of Petitions	SCIH2US-2019-11-13_petition_priority_doc.pdf	55767 b1fd32a6955c8488fd3a8190f2aa97be988745de	no	2
Warnings:					
Information:					
2	Request for USPTO to retrieve priority docs	SCIH2US_2019-11-13_SB0038_form.pdf	162304 8913900427233 67c1eaf990e5ff7340e35f4a55d	no	2
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30682 4b225b14592c8f51c2fc7894a41782de56e46d64	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	248753		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/591,952	01/08/2015	Lauri Valjakka	SCIH 2 US	5164

TITLE OF INVENTION: Method of and system for providing access to access restricted content to a user

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$500	$0.00	$0.00	$500	11/14/2019

EXAMINER	ART UNIT	CLASS-SUBCLASS
BAYOU, YONAS A	2434	726-028000

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Electronic Patent Application Fee Transmittal

Application Number:	14591952
Filing Date:	08-Jan-2015
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Filer:	Toimi Teemu Teelahti/Ross Worrell
Attorney Docket Number:	SCIH 2 US

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
PUBL. FEE- EARLY, VOLUNTARY, OR NORMAL	1504	1	0	0
UTILITY APPL ISSUE FEE	2501	1	500	500
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**500**

Electronic Acknowledgement Receipt

EFS ID:	37746926
Application Number:	14591952
International Application Number:	
Confirmation Number:	5164
Title of Invention:	Method of and system for providing access to access restricted content to a user
First Named Inventor/Applicant Name:	Lauri Valjakka
Customer Number:	95002
Filer:	Toimi Teemu Teelahti/Ross Worrell
Filer Authorized By:	Toimi Teemu Teelahti
Attorney Docket Number:	SCIH 2 US
Receipt Date:	14-NOV-2019
Filing Date:	08-JAN-2015
Time Stamp:	06:01:24
Application Type:	Utility under 35 USC 111(a)

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PRIORITY DOCUMENT

Hakija Applicant	**1. VALJAKKA, Lauri** **LAPPEENRANTA** **2. JUSSILA, Jukka-Pekka** **LAPPEENRANTA** **3. TAPIO, Jari** **LAPPEENRANTA**
Patenttihakemus nro Patent application no	**20145013**
Tekemispäivä Filing date	**08.01.2014**
Kansainvälinen luokka International class	**G06F**
Keksinnön nimitys Title of invention	**"A method of and system for providing access to access restricted content to a user"** **(Menetelmä ja järjestelmä pääsyn antamiseksi käyttäjälle käyttörajoitettuun sisältöön)**

Täten todistetaan, että oheiset asiakirjat ovat tarkkoja jäljennöksiä Patentti- ja rekisterihallitukselle alkuaan annetuista selityksestä, patenttivaatimuksista ja piirustuksista.
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A METHOD OF AND SYSTEM FOR PROVIDING ACCESS TO ACCESS RESTRICTED CONTENT TO A USER

FIELD OF THE INVENTION

This invention relates generally to a method of using digital rights management keys to provide access to access restricted content. In particular, this invention relates to an apparatus, method and/or system for providing access to access restricted content to a user and a method thereof.

BACKGROUND TO THE INVENTION

Many publishers, copyright holders, and individuals wish to control the use of digital content and devices after sale. There are numerous ways of controlling and protecting such digital content, for example, using digital rights management methods. However, such digital rights management methods are in general not effective.

The aim of the present invention is thus to provide an alternative method of and a system for providing access to access restricted content to a user.

SUMMARY OF THE INVENTION

According to a first aspect of the invention, there is provided a system for providing access to access restricted content to a user, the system including a communication arrangement operable to receive a content request message, the content request message including a content identifier, a processor configured to cause a first determination to be performed to yield a positive or a negative result, a validation module configured to, in response to the first determination yielding a positive result, obtain a first digital rights management key, the processor being further configured to cause a second determination to be performed to yield a

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positive or a negative result, and responsive to the first and second determinations yielding a positive result, the validation module is configured to cause access to the access restricted content to be provided to the user.

According to a second aspect of the present invention, there is provided a method, comprising receiving a content request message, the content request message including a content identifier of an access restricted content, causing a first determination to be performed to yield a positive or a negative result, obtaining, in response to the first determination yielding a positive result, a first digital rights management key, causing a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, causing access to the access restricted content to be provided to the user.

In a first set of embodiments of the invention in accordance with the second aspect, the method comprises causing transmission of the access restricted content to the user, wherein the access restricted content comprises in encrypted form at least one of a second and a third digital rights management key, wherein the at least one of the second and a third digital rights management key is obtainable from the access restricted content by using the first digital rights management key.

In a second set of embodiments of the invention in accordance with the second aspect, the second determination is based at least in part on a fingerprint of the access restricted content.

According to a first set of variants of the second set of embodiments in accordance with the second aspect, the method comprises performing the second determination by comparing a first fingerprint received in the apparatus from the user to a second fingerprint received in the apparatus from a content database.

According to a third aspect of the present invention, there is provided an apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to obtain an access restricted content from at least one of a content database and a content providing server, obtain a first digital rights management key, derive, using the first digital

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rights management key, from the access restricted content information describing encryption properties of the access restricted content, and to derive, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key.

According to a fourth aspect of the present invention, there is provided a method, comprising obtaining an access restricted content from at least one of a content database and a content providing server, obtaining a first digital rights management key, deriving, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content, and deriving, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key.

According to a fifth aspect of the present invention, there is provided a non-transitory computer readable medium having stored thereon a set of computer readable instructions for a causing an apparatus to perform actions, the computer readable instructions comprising code for receiving a content request message, the content request message including a content identifier of an access restricted content, code for causing a first determination to be performed to yield a positive or a negative result, code for obtaining, in response to the first determination yielding a positive result, a first digital rights management key, code for causing a second determination to be performed to yield a positive or a negative result, and code for causing, responsive to the first and second determinations yielding a positive result, access to the access restricted content to be provided to the user.

According to a sixth aspect of the present invention, there is provided an apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to receive a content request message, the content request message including a content identifier of an access restricted content, cause a first determination to be performed to yield a positive or a negative result, obtain, in response to the first determination yielding a positive result, a first digital rights management key, cause a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, to cause access to the access restricted content to be provided to the user.

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In some embodiments of the invention in accordance with the first, second, third, fourth, fifth and/or sixth aspects the first digital rights management key is unique to a specific session.

In response to a determination that the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers, the validation module may generate a first digital rights management key and a header associated with the content identifier.

The communication arrangement may be operable to receive a content usage request message, the content usage request message including the user identifier, the first digital rights management key and the content identifier.

In an embodiment, the interrogation module may further be operable to interrogate the content database in order to determine whether or not the first digital rights management key and content identifier matches with any combination of first digital rights management key and the content identifier stored in the content database; and if the answer is affirmative, the validation module may provide content access to access restricted content to the user.

The header may be associated with the particular content and the first digital rights management key are used to obtain access to the access restricted content.

The validation module may further analyze the header associated with the first digital rights management key and may prepare a second digital rights management key.

The system may include a decryption module operable to use the first digital rights management key and second and third digital rights management keys in order to decode the content, thereby allowing the user use of content.

The validation module may further analyze the second digital rights management key in order to prepare a third digital rights management key.

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In this embodiment, the interrogation module may be operable to determine whether or not the second digital rights management key is used to prepare the third digital rights management key; and if the answer is affirmative, the decryption module may use the first digital rights management key and the third digital rights management key to decode the content, thereby allowing the user use of content.

If the answer is negative, the decryption module may use the first digital rights management key, the second digital management key and the third digital rights management key to decode the content, thereby allowing the user use of content.

The content may be compressed. In some embodiments, the content is media content.

In this embodiment, the system may include an extraction module being operable to extract the compressed content, thereby allowing the user use of the content.

In addition, the system may include a calculation module being operable to calculate a time period indicative of time in which the user uses the content. The validation module may stop the use of the content by the user, in response to a determination that the calculated time period is equal to a pre-defined time period.

In an alternative embodiment, the system may include a content registration module being operable to register the status content usage against the user identifier and the content identifier on the content database. The status content usage may include the calculated time period associated with the user identifier and the content identifier.

In at least some embodiments, the user identifier is an identifier associated with a communication device of the user such as a MSISDN number of the communication device.

The invention further extends to a non-transitory computer readable medium having stored thereon a set of computer readable instructions for a causing a processor to provide access to access restricted content to a user comprising the computer implemented steps of;

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receiving a content request message, the content request message including a unique identifier associated with the user and a content identifier;

interrogating a content database of content identifiers, digital management keys and user identifiers in order to determine whether or not the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers;

in response to a determination that there is a match, retrieving a first digital rights management key and a header associated with the user identifier;

interrogating the content database in order to determine whether or not the content identifier and the first digital rights management key matches with any combination of content identifier and first digital rights management key stored in the content database and associated with the user identifier; and

if the answer is affirmative, providing the content to the user.

In response to a determination that the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers, the computer readable instructions may include the computer implemented step of generating a first digital rights management key and a header associated with the content identifier.

The computer readable instructions may include the computer implemented steps of;

receiving a content access request message, the content access request message including the user identifier, the first digital rights management key and the content identifier;

interrogating the content database in order to determine whether or not the first digital rights management key and content identifier matches with any combination of first digital rights management key and the content identifier stored in the content database; and

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if the answer is affirmative, the providing content access to access restricted content to the user.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be described, by way of example only, with reference to the accompanying drawings in which:

Figure 1 shows an example of network topology including a system for providing access to access restricted content to a user;

Figure 2 shows the system of Figure 1 in more detail;

Figure 3 shows a flowchart representing an example method of providing access to access restricted content to a user, according to another aspect of the present invention;

Figure 4 shows an example flow graph of a first method in accordance with at least some embodiments of the invention;

Figure 5 shows an example flow graph of a second method in accordance with at least some embodiments of the invention;

Figure 6 shows an example flow graph of a third method in accordance with at least some embodiments of the invention;

Figure 7 illustrates different DRM levels;

Figure 8 illustrates DRM key handling options;

Figure 9 illustrates DRM layers, and

Figure 10 illustrates an example DRM process sequence.

DETAILED DESCRIPTION

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The following description of the invention is provided as an enabling teaching of the invention. Those skilled in the relevant art will recognize that many changes can be made to the embodiment described, while still attaining the beneficial results of the present invention. It will also be apparent that some of the desired benefits of the present invention can be attained by selecting some of the features of the present invention without utilizing other features. Accordingly, those skilled in the art will recognize that many modifications and adaptations to the present invention are possible and can even be desirable in certain circumstances, and are a part of the present invention. Thus, the following description is provided as illustrative of the principles of the present invention and not a limitation thereof.

In Figure 1 of the drawings, reference numeral 10 refers generally to an example of network topology including a system for providing access to access restricted content to a user. Referring also to Figure 2, an example system for providing access to access restricted content to a user is indicated by reference numeral 20.

The topology 10 includes a communication device 12 belonging to or used by a user (not shown) who intends to obtain access to access restricted content. It will be appreciated that the communication device 12 is may comprise a personal computer located at the premises of the user, a smart phone or a Personal Digital Assistant (PDA), for example. However, the communication device 12 can be a mobile telephone of the user or any other device with suitable communication capability. Communication device 12 may comprise any suitable device with communication capability, examples including tablet devices, set-top boxes, video game consoles etc.

In simple terms, the user (not shown) attempts to obtain access to access restricted content through the use of the user's communication device 12. The access restricted content may be stored in a database which is indicated as media storage device with reference numeral 14. Prior to the user obtaining access to the access restricted content, the system 20 may be configured to ensure that the user or communication device 12 of the user has particular

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access, i.e., the communication device 12 is authorized to obtain access to such access restricted content.

The illustrated topology includes a content provider indicated as reference numeral 16. The content provider may be a publisher or a copyright holder, or any suitable person who owns rights to the content and wishes to restrict access to such content. In other cases, the content provider may be the copyright owner, while a content distributor can be another party which has been authorized to manage access to the content on behalf of the content provider 16. The restricted content is digital content in a form of digital media. The digital media can be of any suitable form, for example, text, audio, video, graphics, animations or images.

The system 20 (further described in Figure 2) is communicatively coupled to a communications network in the form of the Internet 18. Also communicatively coupled to the Internet is the communication device 12. The communication device 12 is thus connected to the system 18 via the Internet, for example. In use, the user may obtain access to the media content through Internet 18. The topology further illustrates a media storage device 14 which may form part of the system 20. Alternatively, the system 20 may be connected to the media storage device 14 via Internet 18 (as shown in Figure 1).

Referring now to Figure 2, the system 20, hereafter referred to as a content access authorization system 20, includes a content access authorization server 22 which, in turn, includes a processor 24 defining a plurality of modules 26, 28, 30 and 32 which correspond to functional tasks performed by the processor 24. The processor 204 includes an interrogation module 26, a validation module 28, a calculation module 30 and a decryption module 32. Modules 26, 28, 30 and 32 may be comprised of software modules configured to cause processor 24 to perform corresponding functions, or the modules may comprise hardware and software elements. For example, a decryption module may comprise decryption software and hardware features of processor 24 designed to facilitate decryption of data in processor 24. Processor 24 may comprise an Intel Atom processor, for example. Server 22 may comprise

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memory, which is not illustrated, the memory being operable to store computer instructions processor 24 may execute to cause server 22 to perform various actions.

The content access authorization server 22 further includes a communication arrangement 34 operable to connect to the Internet 18. Communication arrangement 34 may comprise, for example, an Ethernet, fiber optic of wireless data interface. The authorization system 20 is operably connectable to a content database, that is, media storage device 14 for storing media content, content identifiers, digital management keys and/or user identifiers. The data storage device 14 can form part of the server 22 or be comprised as a standalone device external to server 22. In particular, there may be a plurality of media storage devices located within premises of various content providers and/or content distributors and communicatively coupled to the media storage device 14. The media storage device 14 stores therein a plurality of content identifiers and associated content, digital rights management keys and/or user identifiers. For example, each user may be able to have access to a particular content associated with a particular content identifier. Such user will be identified through the user identifier. In particular, the user identifier may comprise an identifier associated with the personal computer 12 of the user. In this case, the user may only be able to obtain access to the access restricted content, if the user attempts to access the access restricted content using the personal computer 12. In an embodiment where the communication device 12 is a mobile telephone, the identifier associated with the user may comprise an MSISDN number or session initiation protocol SIP identity associated with that particular mobile telephone.

Although described herein primarily with reference to an authorization server, communication device 12 may have similar structure, in particular communication device 12 may comprise a processor, memory and a communications arrangement which may each be similar to those described above.

Referring now also to Figure 3 which shows a high-level method for providing access to access restricted content to a user, in accordance with at least one embodiment of the invention. The example method 40 is not necessarily dependent on the system 20 and/or the network topology 10, and vice versa.

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In the illustrated embodiment, the communication arrangement 34 receives (at block 44) a content request message from the personal computer 12 of the user. The content request message includes a unique identifier associated with the user and a content identifier. Therefore, the user can user a user interface, e.g., a keyboard and input, e.g., serial number of the personal computer 12 and a predefined number of the content to which user wishes to obtain access. The communication arrangement can include a receiver module (not shown) operable to receive the content request message.

The interrogation module 26 interrogates (at block 44) the media storage device 14 whether or not the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers. This is so as to check whether the user, for example, the communication device 12 of the user is registered to be able to have access to the media content. The media storage device 14 may have been populated during a period when the user pre-registered to have access to the access restricted content. For example, when the user purchased the media content, the user could have been requested to pre-register then. The pre-registration process can take any conventional format. For example, pre-registration may comprise that certain subscriber classes in a cellular network are granted access to certain classes of content, wherein granting access to a class of content comprises granting access to each content item comprised in the class of content.

The validation module 28 retrieves (at block 46) a first digital rights management key (Key #1) and a header associated with the user identifier in response to a determination that the received content identifier and user identifier matches with at least one combination of the stored user identifiers and content identifiers. Key #1 is retrieved from the media storage device 14, alternatively, Key #1 can be retrieved from a server which is located at the premises of the content distributor and/or content provider. In other embodiments, the Key #1 can be located at a server located at the user's premises. The interrogation module (at block 48) further interrogates the media storage device 14 in order to determine whether or not the content identifier and the Key #1 matches with any combination of content identifier and f Key #1 stored in the media storage device 14 and associated with the user identifier. If the answer is affirmative, the validation module (at block 50) provides the access restricted

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media content to the user. Therefore, the Key #1 may be associated with the personal computer 12 of the user. In this instance, the Key #1 is used to provide the user access to access restricted media content. The Key #1 only provides access to the content i.e. the user is not able to use the content. Therefore, if the user attempts to obtain access to the access restricted content using a different personal computer, the user will not be able to obtain such access. This will prohibit users from providing the Key #1 to any other party in order for that party to access the access restricted content at another personal computer. The header is associated with the particular media content and the Key #1 and the header are used to obtain access to the access restricted content.

In an embodiment, in response to a determination that the received content identifier and user identifier matches with any combination of the stored user identifiers and content identifiers, the validation module 28 may generate (not shown) a first digital rights management key and a header associated with the content identifier. The Key #1 can be generated from the environment and media content parameters. Generating a key from environment and media content parameters may comprise, for example, using parameters relating to communication device 12, a subscription of the user or aspects of the content in a key generation process. As a specific example, where communication device 12 comprises a cellular telephone, the key generation process may use as input information relating to a secret stored on a subscriber identity module, SIM, card. Therefore, each time when the user requires access to access restricted content, new Key #1 may be generated.

Once the user has access to the access restricted media content, the user may need to use the media content. In that instance, the communication arrangement 34 may receive (not shown) a content usage request message from the personal computer 12 of the user. In simple terms, the user uses the keyboard to indicate that he / she requires usage of the restricted media content. The content usage request message includes the user identifier, the Key #1 and the content identifier. Therefore, the user will use the generated / retrieved Key #1 in order to be allowed to use the restricted media content. The user may wish to use the restricted media content by, for example, copying the media content, listening to the media content or editing (if allowed) the media content. The validation module 28 analyses the header associated with

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the Key #1 and prepares a second digital rights management key (Key #2). The preparation of the Key #2 may comprise, for example, performing a cryptographic operation on at least part of the access restricted content, wherein the cryptographic operation may employ Key #1. The cryptographic operation may comprise decrypting Key #2 by using Key #1. A decryption module (30) may be configured to use Key #1 and Key #2 to decode the media content, thereby allowing the user use of media content.

The validation module may further use Key #1 in order to prepare a third digital rights management key (Key #3). It will be appreciated that at least in some embodiments Key #2 and Key #3 cannot be prepared without Key #1. In these embodiments, the interrogation module 26 determines whether or not Key #1 is used to prepare the Key #2, and if the answer is affirmative, the decryption module 30 uses Key #1 and Key #2 to decode the media content, thereby allowing the user use of content. Alternatively, the decryption module may use Key #1, Key #2 and Key #3 to decode the media content, thereby allowing the user use of content. Key #3 may be obtained from the access restricted content using Key #1 in a similar was as described above in connection with obtaining Key #2.

In an example embodiment, the media content is compressed. In this embodiment, the system can include an extraction module (not shown). The extraction module is operable to extract the compressed media content, thereby allowing the user use of the content.

A calculation module 32 calculates (not shown) a time period indicative of time in which the user uses the content. The use of the media content may be available for a particular time period. For example, a user can be allowed to use the media for only one (1) hour. Therefore, the calculation module 32, as the user uses the media content, can calculate the user's usage period. When the calculated time period reaches a pre-defined usage time, e.g., one (1) hour, the validation module28 stops the use of the media content by the user.

In an alternative embodiment, the system 20 includes a content registration module (not shown). The content registration module registers the status content usage against the user identifier and the content identifier on the media storage device 14. The status content usage includes the calculated time period associated with the user identifier and the content identifier. Therefore, it is possible to detect the rate of usage of the media content for each

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user, that is, the number of times the media content was accessed. The status content usage will also be able to provide an indication of the last time the media content was accessed by the user.

At least one of the first, second and third digital rights management keys may be, depending on the embodiment, arranged to be session-specific in the sense that it is generated dynamically for use in a single session. This is advantageous since if a session-specific key is compromised, it cannot be used to gain access to content in a subsequent session.

In general there is provided an apparatus, comprising at least one processor and a memory comprising program instructions. The apparatus may comprise a server, for example. The processor, memory and program instructions configured to cause the apparatus at to receive a content request message, the content request message including a content identifier of an access restricted content. The content request message may further comprise an identifier associated with the user. The apparatus may be caused to cause a first determination to be performed to yield a positive or a negative result and to obtain, in response to the first determination yielding a positive result, a first digital rights management key. The first determination may comprise a query, such as a query transmitted to a content database, the query comprising the content identifier and the identifier associated with the user. Alternatively to a query, the first determination may comprise a determination as to whether the access restricted content can be found in accordance with the content request.

The apparatus may be caused to cause a second determination to be performed to yield a positive or a negative result, and responsive to the first and second determinations yielding a positive result, to cause access to the access restricted content to be provided to the user. The second determination may be based at least in part on a fingerprint of the access restricted content. The second determination may comprise a comparison between a first fingerprint received in the apparatus from the user to a second fingerprint received in the apparatus from a content database.

The second determination may comprise a check as to whether the user has rights to access the access restricted content.

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In response to the first determination yielding a positive result, for example when a content database returns a positive result to a query, the apparatus is in at least some embodiments configured to obtain a header associated with the content identifier and wherein the header associated with the content identifier and the first digital rights management key are usable to at least in part obtain access to the access restricted content. The header may be obtained by the apparatus, for example, by receiving it from the content database.

In general there is provided a second apparatus comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to obtain an access restricted content from at least one of a content database and a content providing server. The second apparatus may be configured to obtain the access restricted content by receiving it over a cellular or Ethernet connection, for example. The second apparatus may be configured to store the access restricted content, at least in part, in a memory comprised in the second apparatus.

The second apparatus may be configured to obtain a first digital rights management key, to derive, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content and derive, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key. Where the second apparatus is caused to derive a second digital rights management key, it may be further configured to use the first and second digital rights management keys to obtain access to the content payload. The content payload may comprise, for example, a media file such as an audio or video recording.

Figure 4 shows an example flow graph of a first method in accordance with at least some embodiments of the invention. On the vertical axes are, from left or right, a content database, a content server, a client and content. The illustrates method begins in phase 410 and proceeds to phase 420, where the client performs a content location, for example by searching with at least one keyword. As a response, in phase 430 the client receives a content identifier. In phase 440, the client transmits a message to the content server, the message comprising the content identifier received in phase 440 and an identifier of the client. The message of phase 440 may comprise a content request message. Responsive to receiving the message of phase

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440, the content server may transmit, in phase 450, a query to the content database, the query comprising the content identifier and client identifier.

Responsive to the query, the content database may reply, in phase 460, to the content server with a message comprising a validation result wherein the validation result may comprise a first DRM key. The content server determines whether the validation was successful in phase 470. In case the validation was unsuccessful, for example, where the client does not have access to the content, processing advances from phase 470 to phase 480 and ends. On the other hand where the validation was successful and the message of phase 460 comprises a first DRM key, processing advances from phase 470 to phase 490 where the content server transmits the first DRM key to the client.

Responsive to receipt of the first DRM key in phase 490, the client may access the content using at least in part the first DRM key. This is illustrated as phase 4100. The client may obtain, in phase 4120, a fingerprint of the content wherein the obtaining may be based at least in part on the first DRM key. In phase 4130, the client may transmit the fingerprint to the content server, optionally with the content identifier and in phase 4140, the content server may query the content database for the content fingerprint. The query may comprise the content identifier. In phase 4150, the content database may responsively provide the fingerprint to the content server. In phase 4160, the server may compare the fingerprints received in phases 4150 and 4130. In case of mismatch, the processing advances to phase 4170 and ends. In case the fingerprints match, processing advances to phase 4180 where the client is provided with a positive validation result.

Responsive to the positive validation result of phase 4180, the client in phase 4190 proceeds to access the content to retrieve a DRM header, and optionally also to apply the first DRM key to the header, responsive to which the client gains access, phase 4200, to an open DRM header of the content. Using the header the client may be enabled to prepare second and third DRM keys, and, optionally, to apply at least one of the second and third DRM keys to retrieve payload of the content. This retrieval is illustrated as phases 4210 and 4220.

After using the payload of the content, the client may inform the content server of this, phase 4230, and the server may inform the content database of this, in phase 4240. In phase 4250,

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the content database may inform the content server of a registration of the content, the message of phase 4250 optionally comprising a result code. The content server may notify the client of this, phase 4260 and the client may modify the content accordingly, phase 4270.

When the first method is used, at least one of the following may apply:

1) the client has an on-line connection with the server, and 2) the client has acquired the content before the validation starts.

Figure 5 shows an example flow graph of a second method in accordance with at least some embodiments of the invention. The vertical axes are identical to those in Figure 4. The process of Figure 5 begins in phase 510 and proceeds to phase 520, where the client requests content from the server. The message of phase 520 may comprise a content identifier and client identifier. The server may, phase 530, query the content database with the content identifier and client identifier. The content database replies in phase 540 whether the client should be granted access to the content.

In phase 550 the server determines whether the validation was successful, in other words whether the client is to be granted access to the content. In case no, processing advances to phase 560 and the process ends. In case the answer is yes, the server generates a DRM header, for example a dynamic DRM header, and a first DRM key. In phase 570 the server encrypts the content and streams it to the client, as well as calculates a content fingerprint.

In phase 580 the client saves the received content, optionally in a temporary location and in phase 590 the client obtains from the content a content fingerprint, which is sent along with the content identifier to the server in phase 5100.

In phase 5110 the server queries the content database for a content fingerprint of the content, the query comprising the content identifier and the client identifier. The server receives the fingerprint from the database in phase 5120. In phase 5130 the server determines whether the fingerprints received in phases 5120 and 5100 are the same. In case they are not, the server informs the client of this in phase 5140, and responsively the client removes the content it stored in phase 580. In case the fingerprints match, phase 5150, the client is informed of this.

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In embodiments where the content was stored in a temporary location in phase 580, the client in phase 5160 moves the content to a final location. In embodiments where the content was stored in a non-temporary location in phase 580, the client may validate the content in phase 5160.

When the second method is used, at least one of the following may apply:

1) the client has an on-line connection to the server for receiving the streamed content, and 2) the client has been registered to the server before the streaming is started.

Figure 6 shows an example flow graph of a third method in accordance with at least some embodiments of the invention. On the vertical axes are illustrated, from left to right, a content accessor, who may be a client, a local provider and the content being accessed. The process begins in phase 610 and proceeds to phase 620, where the content accessor requests content from a local provider with a content identifier comprised in the request message. In phase 630, the local provider locates the content using the content identifier. In case the content is determined to not exist, processing advances to phase 640 and 650, where the local provider informs the accessor of this and the process ends. On the other hand if the content is determined to exist, processing advances to phase 660. The local provider generates a first DRM key and obtains a DRM header. The DRM is verified, and in case the verification fails processing advances to phase 670 where the content accessor is informed of this and processing ends. On the other hand if DRM verification succeeds, processing advances to phase 680 and the content accessor is granted access to the content, which may comprise, for example, an audio, video, or audiovisual presentation.

When the third method is used, at least one of the following may apply:

1) the content has been delivered to the content accessor from the server or from an external supplier. 2) the client is able to use the content without leaving it in an unprotected state. 3) the content is provided in a format that cannot be stored for later access, and 4) the content DRM is accessed only when the content needs to be shown or played.

Figure 7 illustrates different DRM levels. DRM levels may in this example be numbered from zero to five, with each level providing for different encryption and key management functionalities. Which level is used for a specific content item, may be determined from a

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DRM header of the content, for example. The keys described in the Figure may comprise DRM keys, for example.

Figure 8 illustrates DRM key handling options.

Figure 9 illustrates DRM layers in an example embodiment of the invention. The illustrated layers may be applied in sequence to the media layer, which may comprise a payload of the content item. To obtain access to the payload, a user may need to apply decryption operations in reverse order to the order in which encryption operations were performed. In different embodiments, at least one of the encryption layers illustrated in Figure 9 may be omitted.

Figure 10 illustrates an example DRM process sequence in an example embodiment of the invention. In the illustrated example, a set of DRM encryption layers such as the one illustrated in Figure 9 is opened in phases to ultimately allow access to the media, that is the content payload.

It should be noted that in the above, a "server" may take different forms depending on the embodiment. In particular, alternatively to a fixed computer residing in a network, in some embodiments a server may comprise a peer device to the client device, such as for example where the client device is a tablet or smartphone device, the server may also be a tablet or smartphone device.

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CLAIMS

1. An apparatus, comprising:

means for receiving a content request message, the content request message including a content identifier of an access restricted content;

means for causing a first determination to be performed to yield a positive or a negative result;

means for obtaining, in response to the first determination yielding a positive result, a first digital rights management key;

means for causing a second determination to be performed to yield a positive or a negative result, and

means for causing, responsive to the first and second determinations yielding a positive result, access to the access restricted content to be provided to the user.

2. An apparatus as claimed in claim 1, wherein the first determination is based at least in part on a query, the query comprising the content identifier and an identifier associated with the user.

3. An apparatus according to claim 2, wherein the content request message further includes the identifier associated with the user.

4. An apparatus according to claim 3, wherein the apparatus is further configured to, in response to the first determination yielding a positive result, obtain a header associated with the content identifier and wherein the header associated with the content identifier and the first digital rights management key are usable to at least in part obtain access to the access restricted content.

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5. A method, comprising:

receiving a content request message, the content request message including a content identifier of an access restricted content;

causing a first determination to be performed to yield a positive or a negative result;

obtaining, in response to the first determination yielding a positive result, a first digital rights management key;

causing a second determination to be performed to yield a positive or a negative result, and

responsive to the first and second determinations yielding a positive result, causing access to the access restricted content to be provided to the user.

6. An apparatus, comprising at least one processor and a memory comprising program instructions, the processor, memory and program instructions configured to cause the apparatus at least to:

obtain an access restricted content from at least one of a content database and a content providing server;

obtain a first digital rights management key;

derive, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content, and

derive, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key.

7. An apparatus according to claim 11, wherein the second digital rights management key is at least in part operable to obtain the content payload from the access restricted content.

8. An apparatus according to claim 11 or 12, wherein the apparatus is caused to obtain the first digital rights management key either by receiving it from a server or by generating it at least in part from at least one of environmental parameters and parameters of the access restricted content.

9. A method, comprising:

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obtaining an access restricted content from at least one of a content database and a content providing server;

obtaining a first digital rights management key;

deriving, using the first digital rights management key, from the access restricted content information describing encryption properties of the access restricted content, and

deriving, using the information describing encryption properties of the access restricted content, from the access restricted content at least one of a content payload and a second digital rights management key.

10. A computer program configured to cause a method according to at least one of claims 5 and 9 to be performed.

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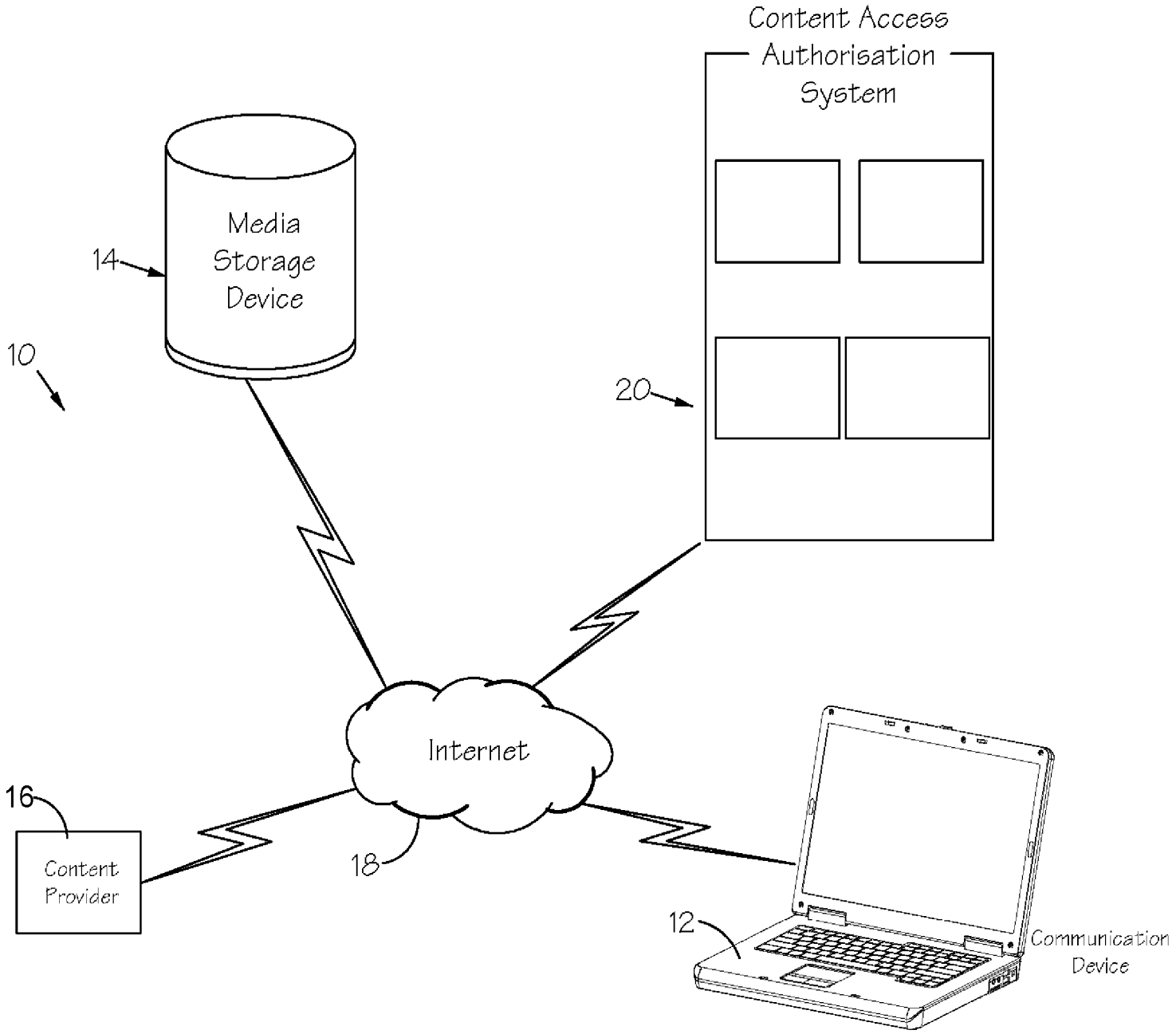

Content Access
Authorisation
System
Media
Storage
Device
14
10
20
Internet
16
Content
Provider
18
12
Communication
Device

FIG 1

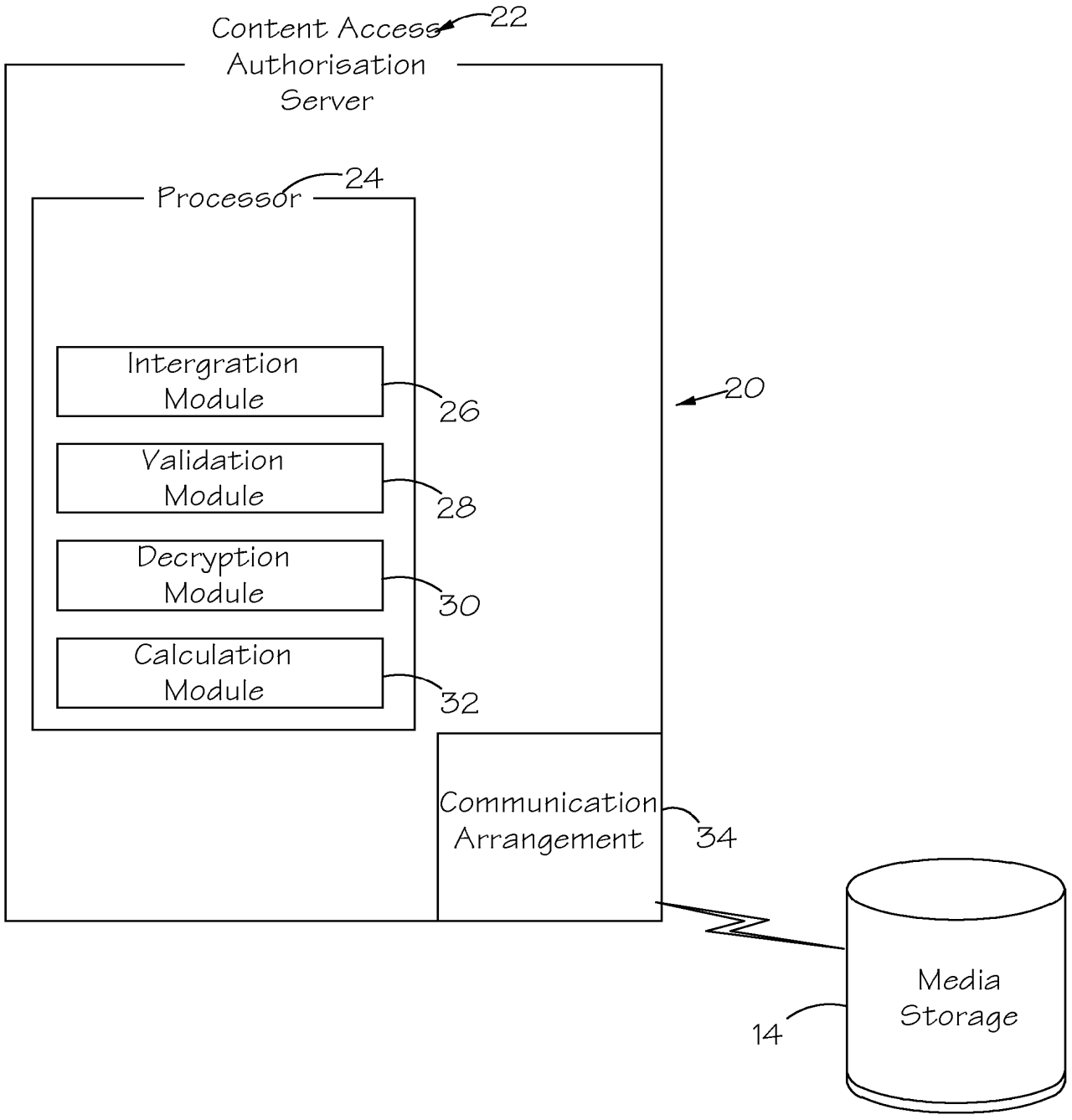


FIG 2

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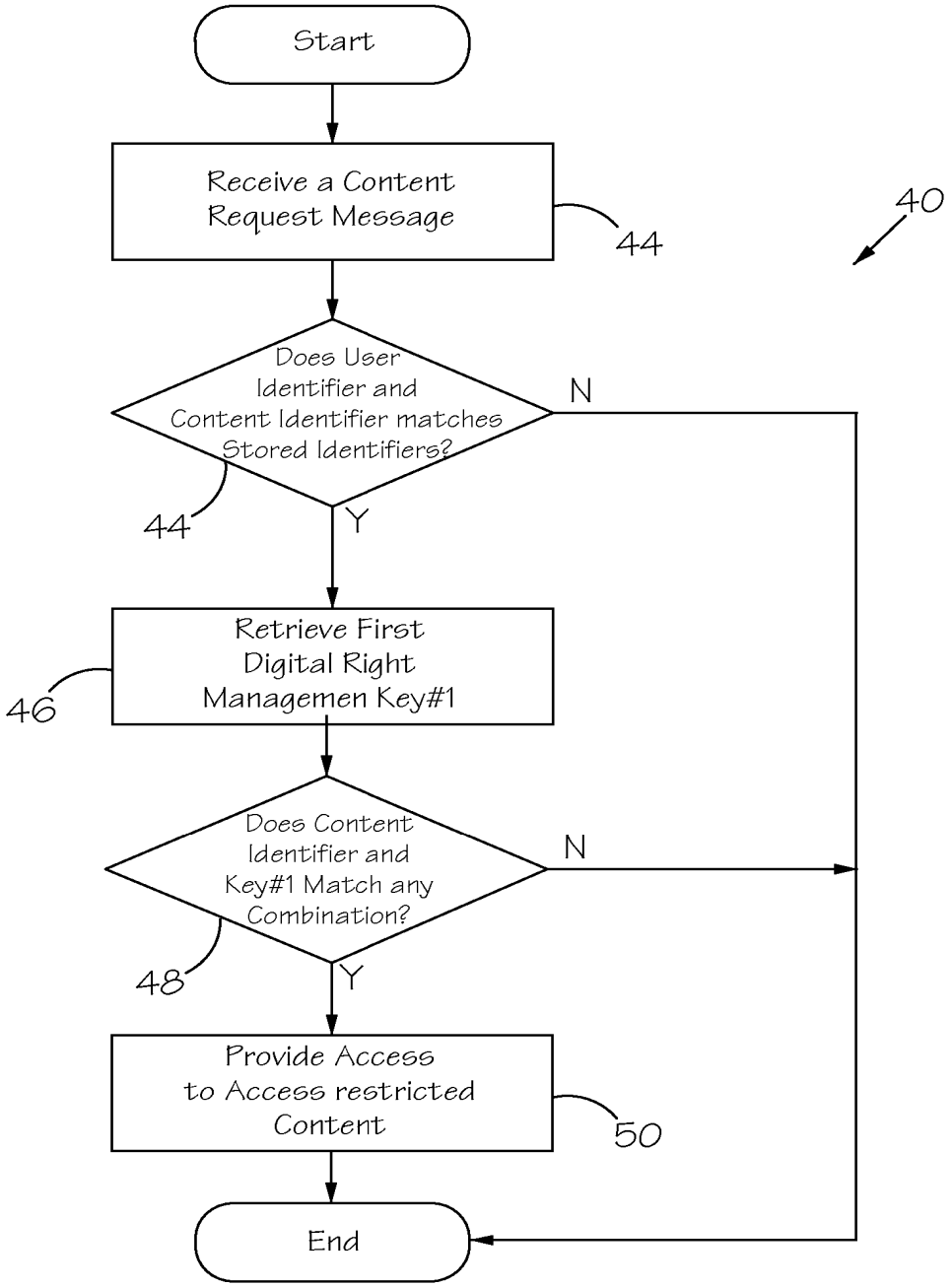


FIG 3

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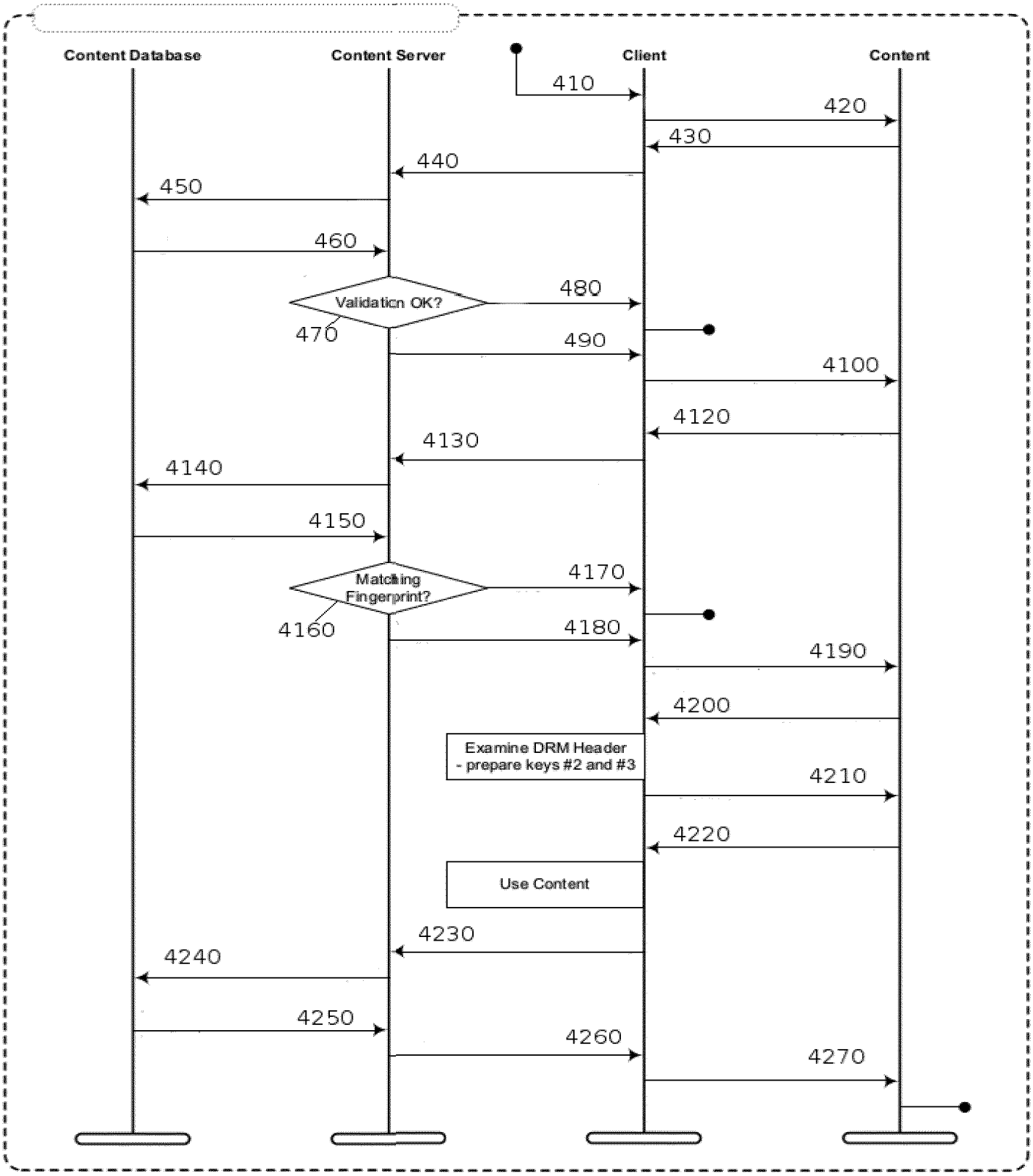


FIGURE 4

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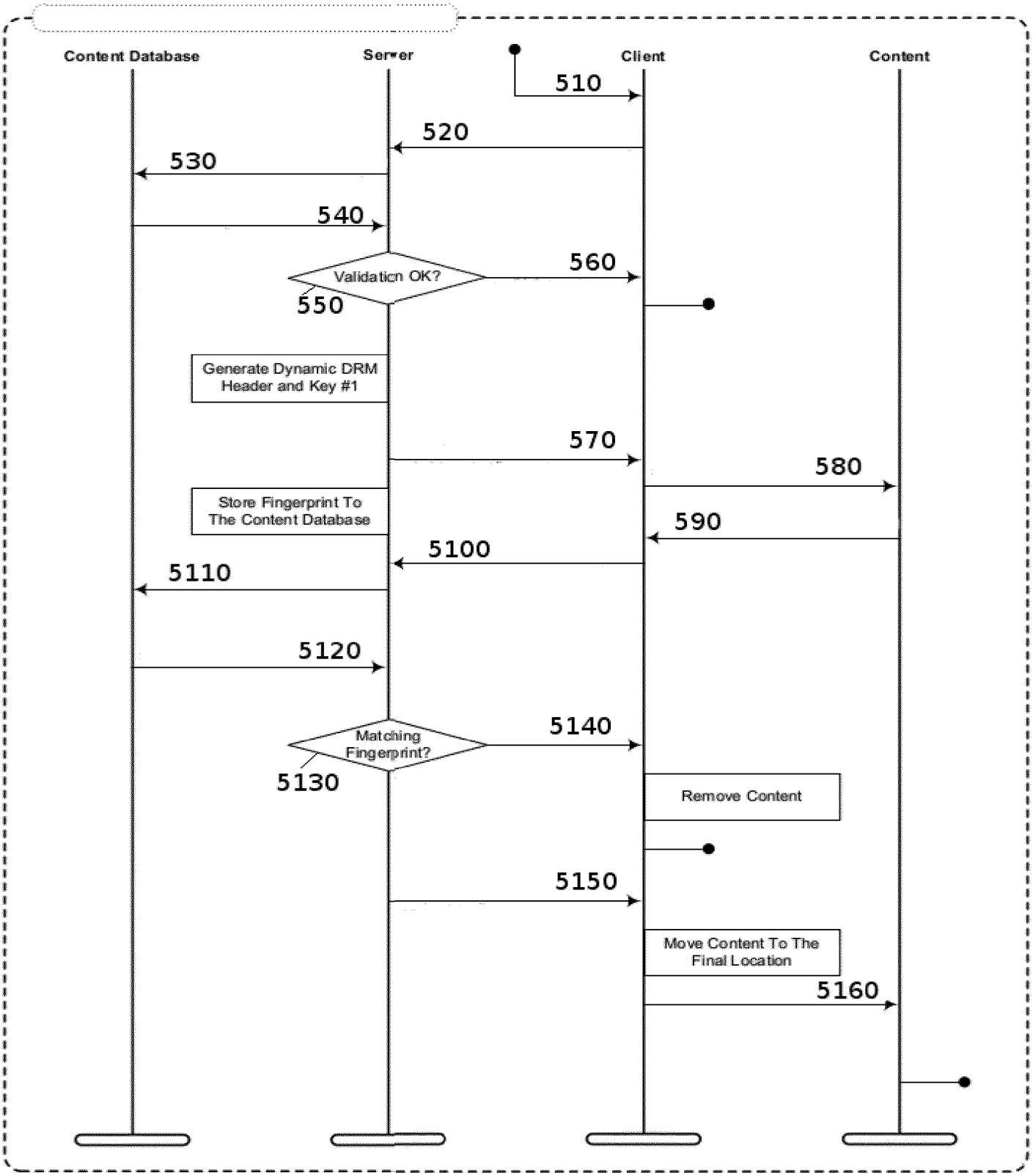


FIGURE 5

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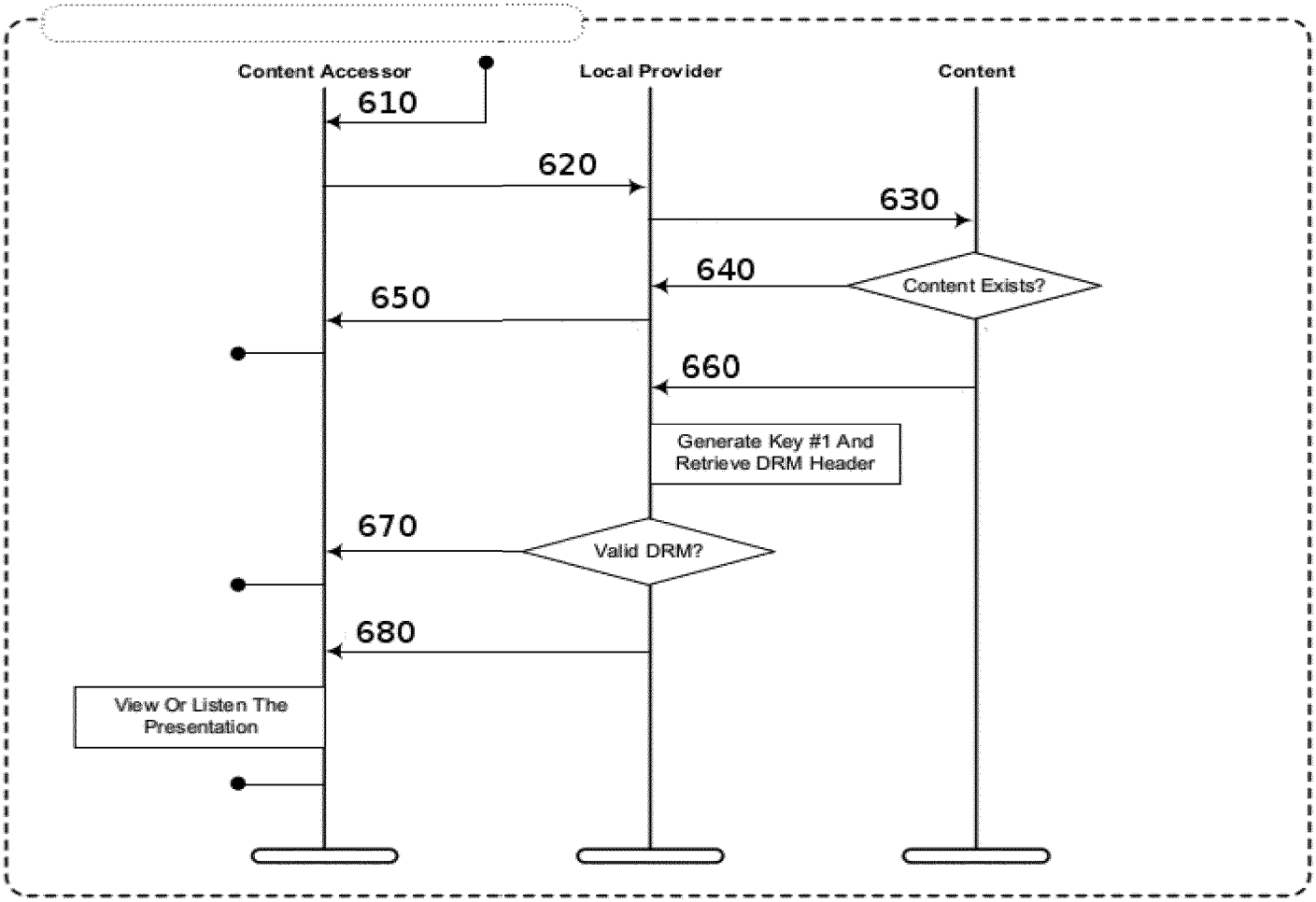


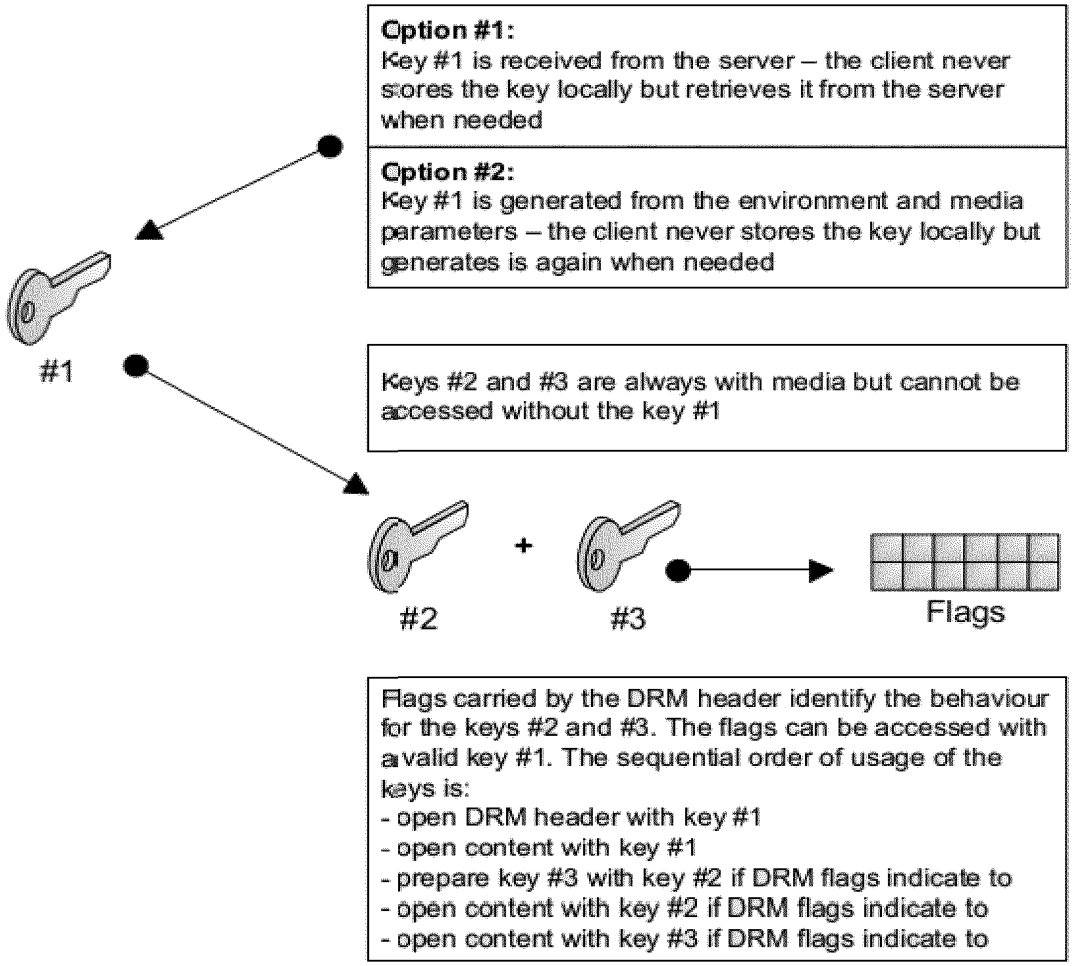
FIGURE 6

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FIGURE 7

0 = no encryption, only header
1 = only key #1
2 = keys #1 and #2
3 = keys #1 and #3, where key #3 is prepared with key #2
4 = keys #1, #2 and #3
5 = keys #1, #2 and #3, where key #3 is prepared with key #2

FIGURE 8



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FIGURE 9

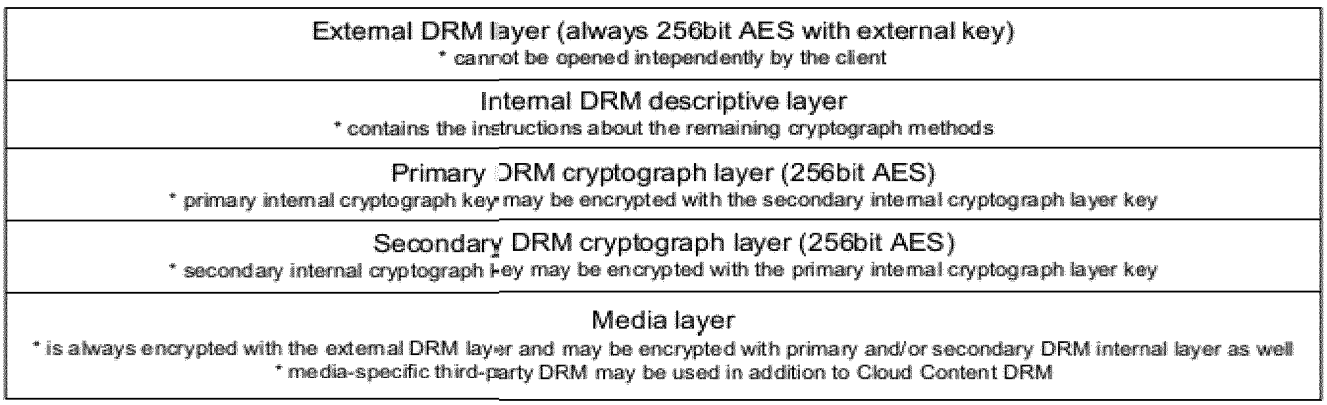
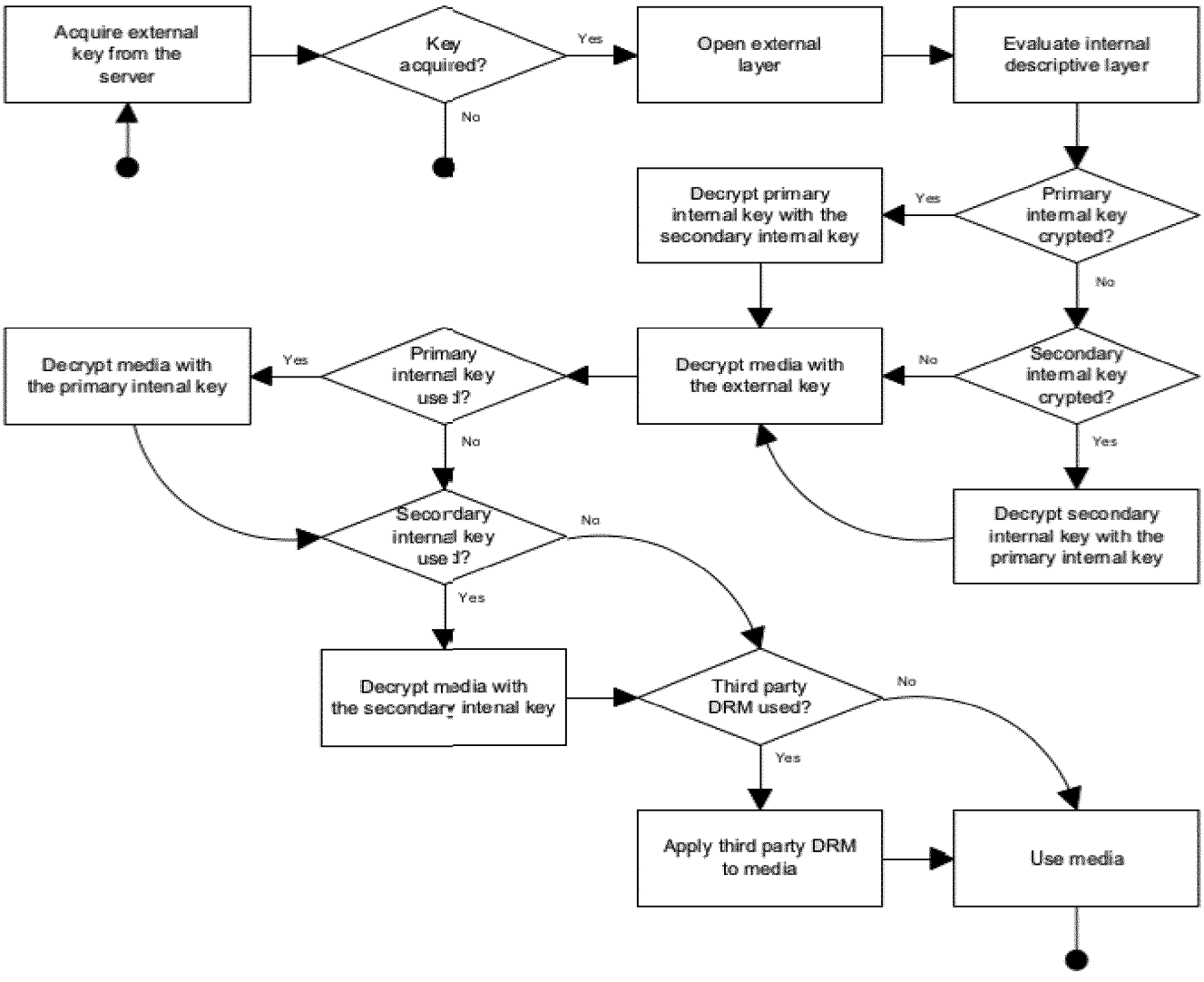


FIGURE 10



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/591,952	01/08/2015	Lauri Valjakka	SCIH 2 US	5164

95002 7590 06/29/2020

Laine IP Oy
PO Box 339
Helsinki, FI-00181
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EXAMINER
BAYOU, YONAS A

ART UNIT	PAPER NUMBER
2434	

NOTIFICATION DATE	DELIVERY MODE
06/29/2020	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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In re Application of	:	
Valjakka et al.	:	
Application No. 14/591,952	:	
Filed: January 8, 2015	:	DECISION ON PETITION
Attorney Docket No. SCIH 2 US	:	
For: Method of and system for providing access to access restricted content to a user	:	

This is a decision on the petition under 37 CFR 1.55(f), filed November 13, 2019, to accept a certified copy of the foreign application.

A grantable petition under 37 CFR 1.55(f) must include:

1) A certified copy of the foreign application, unless previously filed,
2) A showing of good and sufficient cause for the delay, and
3) The petition fee set forth in 37 CFR 1.17(g).

The petition is found to comply with all the above requirements. Accordingly, the petition is **granted**.

The Office acknowledges receipt of the certified copy of foreign Application No. FI 20145013 received on June 22, 2020.

Since the correspondence address given in the present petition differs from the address of record, a courtesy copy of this decision is being mailed to the address given on the petition. Thereafter, the Office will mail all future correspondence solely to the address of record, unless otherwise instructed by the applicant. If appropriate, a change of address should be filed in accordance with MPEP 601.03.

This application is being referred to the Office of Data Management for further processing into a patent.

Any questions concerning this decision may be directed to the undersigned at (571) 272-3226. Questions concerning status or issuance of the application should be directed to the Office of Data Management at (571) 272-4200.

/ANDREA M SMITH/
Andrea Smith
Lead Paralegal Specialist, Office of Petitions

cc: Toimi Teelahti
Seppo Laine Oy
Porkkalankatu 24
FIN-00180 Helsinki, Finland

Transmittal Communication on Petition	Application/Control No. 14/591,952	Applicant(s)/Patent Under Reexamination Valjakka et al.	
	Deciding Official BAYOU, YONAS A	Office of Petitions OPET	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address. --

(ADDITIONAL PARTY'S CORRESPONDENCE ADDRESS)

Toimi Teelahti
Seppo Laine Oy
Porkkalankatu 24
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Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above-identified Application/Patent.

UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/591,952	07/28/2020	10726102	SCIH 2 US	5164

95002 7590 07/08/2020

Laine IP Oy
PO Box 339
Helsinki, FI-00181
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ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

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SC Intelligent Holding Ltd., Lappeenranta, FINLAND;
Jukka-Pekka Jussila, Lappeenranta, FINLAND;
Jari Tapio, Lappeenranta, FINLAND;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

AO 120 (Rev. 08/10)

TO:	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK
Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court WESTERN DISTRICT OF TEXAS, WACO DIVISION on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:21-cv-00945	4/13/2022	WESTERN DISTRICT OF TEXAS, WACO DIVISION

PLAINTIFF	DEFENDANT
Lauri Valjakka	Amazon Web Services, Inc.; and Amazon.com Services, LLC

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	US 10,726,102	7/28/2020	Lauri Valjakka
2			
3			
4			
5			

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

AO 120 (Rev. 08/10)

TO:	Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court WESTERN DISTRICT OF TEXAS, WACO DIVISION on the following

☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:22-cv-00491	5/13/2022	WESTERN DISTRICT OF TEXAS, WACO DIVISION

PLAINTIFF	DEFENDANT
LAURI VALJAKKA	CHARTER COMMUNICATIONS, INC.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	US 10,726,102	7/28/2020	LAURI VALJAKKA
2			
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director **Copy 3—Upon termination of action, mail this copy to Director**
Copy 2—Upon filing document adding patent(s), mail this copy to Director **Copy 4—Case file copy**

AO 120 (Rev. 08/10)

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Mail Stop 8 **Director of the U.S. Patent and Trademark Office** **P.O. Box 1450** **Alexandria, VA 22313-1450**	

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☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:22-cv-00493	5/13/2022	WESTERN DISTRICT OF TEXAS, WACO DIVISION

PLAINTIFF	DEFENDANT
LAURI VALJAKKA	COMCAST CORPORATION

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	US 10,726,102	7/28/2020	LAURI VALJAKKA
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☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:22-cv-00495	5/13/2022	WESTERN DISTRICT OF TEXAS, WACO DIVISION

PLAINTIFF	DEFENDANT
LAURI VALJAKKA	META PLATFORMS, INC.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	US 10,726,102	7/28/2020	LAURI VALJAKKA
2	US 8,495,167	7/23/2013	LAURI VALJAKKA
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

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☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:22-cv-00496	5/13/2022	WESTERN DISTRICT OF TEXAS, WACO DIVISION

PLAINTIFF	DEFENDANT
LAURI VALJAKKA	ZOOM VIDEO COMMUNICATIONS, INC.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	US 8,495,167	7/23/2013	LAURI VALJAKKA
2	US 10,726,102	7/28/2020	LAURI VALJAKKA
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DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:22-cv-00497	5/16/2022	WESTERN DISTRICT OF TEXAS, WACO DIVISION

PLAINTIFF	DEFENDANT
LAURI VALJAKKA	COX COMMUNICATIONS, INC.; and COX ENTERPRISES, INC.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	US 10,726,102	7/28/2020	LAURI VALJAKKA
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT
7/14/2022 Stipulation of Dismissal (document #13).

CLERK	(BY) DEPUTY CLERK	DATE
Philip J. Devlin	Jennifer Velasquez	07/18/2022

Copy 1—Upon initiation of action, mail this copy to Director **Copy 3—Upon termination of action, mail this copy to Director**
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☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:22-cv-00491	5/13/2022	WESTERN DISTRICT OF TEXAS, WACO DIVISION

PLAINTIFF	DEFENDANT
LAURI VALJAKKA	CHARTER COMMUNICATIONS, INC.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	US 10,726,102	7/28/2020	LAURI VALJAKKA
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT
7/14/2022 Stipulation of Dismissal (document #13).

CLERK	(BY) DEPUTY CLERK	DATE
Philip J. Devlin	Jennifer Velasquez	07/18/2022

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AO 120 (Rev. 08/10)

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☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:22-cv-00493	5/13/2022	WESTERN DISTRICT OF TEXAS, WACO DIVISION

PLAINTIFF	DEFENDANT
LAURI VALJAKKA	COMCAST CORPORATION

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	US 10,726,102	7/28/2020	LAURI VALJAKKA
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DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT
07/14/2022 Doc #8 STIPULATION of Dismissal

CLERK	(BY) DEPUTY CLERK	DATE
PHILIP J. DEVLIN		07/14/2022

Copy 1—Upon initiation of action, mail this copy to Director **Copy 3—Upon termination of action, mail this copy to Director**
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AO 120 (Rev. 08/10)

TO:	Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450	REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

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☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:22-cv-00495	5/13/2022	WESTERN DISTRICT OF TEXAS, WACO DIVISION

PLAINTIFF	DEFENDANT
LAURI VALJAKKA	META PLATFORMS, INC.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	US 10,726,102	7/28/2020	LAURI VALJAKKA
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT
07/14/2022 Doc #10 STIPULATION of Dismissal

CLERK	(BY) DEPUTY CLERK	DATE
PHILIP J. DEVLIN		07/14/2022

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director
Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

AO 120 (Rev. 08/10)

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☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:22-cv-00496	5/13/2022	WESTERN DISTRICT OF TEXAS, WACO DIVISION

PLAINTIFF	DEFENDANT
LAURI VALJAKKA	ZOOM VIDEO COMMUNICATIONS, INC.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	US 8,495,167	7/23/2013	LAURI VALJAKKA
2	US 10,726,102	7/28/2020	LAURI VALJAKKA
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DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT
7/13/22 Stipulation of Dismissal (document #7).

CLERK	(BY) DEPUTY CLERK	DATE
Philip J. Devlin	Jennifer Velasquez	07/14/2022

Copy 1—Upon initiation of action, mail this copy to Director **Copy 3—Upon termination of action, mail this copy to Director**
Copy 2—Upon filing document adding patent(s), mail this copy to Director **Copy 4—Case file copy**

AO 120 (Rev. 08/10)

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Mail Stop 8 **Director of the U.S. Patent and Trademark Office** **P.O. Box 1450** **Alexandria, VA 22313-1450**	

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DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:22-cv-00497	5/16/2022	WESTERN DISTRICT OF TEXAS, WACO DIVISION

PLAINTIFF	DEFENDANT
LAURI VALJAKKA	COX COMMUNICATIONS, INC.; and COX ENTERPRISES, INC.

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	US 10,726,102	7/28/2020	LAURI VALJAKKA
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In the above—entitled case, the following patent(s)/ trademark(s) have been included:

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In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT
7/14/2022 - Stipulation of Dismissal - Doc #17

CLERK	(BY) DEPUTY CLERK	DATE
Philip J. Devlin	Suzanne Miles	July 14, 2022

Copy 1—Upon initiation of action, mail this copy to Director **Copy 3—Upon termination of action, mail this copy to Director**
Copy 2—Upon filing document adding patent(s), mail this copy to Director **Copy 4—Case file copy**