(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
18 September 2008 (18.09.2008)

PCT

(10) International Publication Number
WO 2008/110744 A2

(51) International Patent Classification:
G06F 21/00 (2006.01)

(21) International Application Number:
PCT/GB2008/000727

(22) International Filing Date: 4 March 2008 (04.03.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0704647.7 9 March 2007 (09.03.2007) GB

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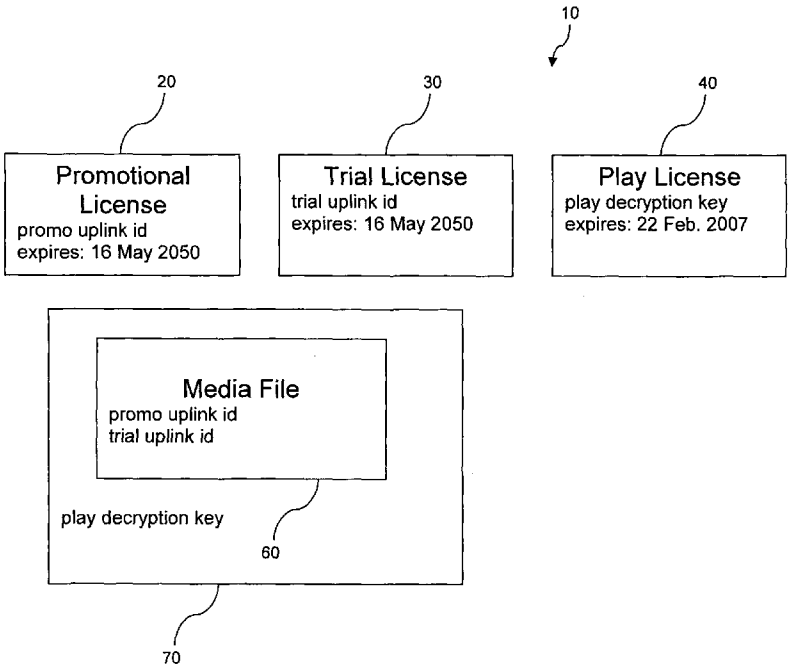
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:
— *of inventorship (Rule 4.17(iv))*

Published:
— *without international search report and to be republished upon receipt of that report*

(54) Title: DIGITAL RIGHTS MANAGEMENT SYSTEM AND METHOD



(57) Abstract: Providing access to a media file by providing a media file (60), associating with the media file a first license (40) granting access to the media file (60), associating a second license (20) with the media file (60), responding to a request to access the media file (60) before a predetermined date by delivering the first (40) and second (20) licenses such that access to the media file (60) is granted, and determining the presence of the second license (20) after the predetermined date.

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DIGITAL RIGHTS MANAGEMENT SYSTEM AND METHOD

Field of the Invention

The present invention relates to a method and system for providing access to media files. In particular, the method and system relate to a digital rights system for media files including but not limited to music, video and computer software.

Background of the Invention

In a traditional method of distributing music a record distributor may produce a promotional track to be played over the radio or other distribution channels in a limited form prior to a general release date. This period is typically known as the promotional period. During the promotional period consumers may have access to the track through their radio.

Following the release date consumers may buy the record in the usual way in a convenient form such as record, CD or tape.

In a more recent development tracks have become available to download individually via the internet through online distributors such as iTunes (RTM) in a digital format (for example the MP3 format or similar). Usually, upon payment of a fee the consumer acquires a track file directly from a vendor.

Unfortunately, many illegal download sites have facilitated unrestricted distribution of tracks and other files in huge numbers without any revenue returning to the copyright owners. Such sites may use peer-to-peer (p2p)

networking without any central server and so it is difficult to regulate. In view of this abuse, copyright owners are reluctant to provide their tracks in unprotected file formats although they still supply CDs containing tracks in the Red Book Audio format which is generally unprotected. Instead, they may prefer to provide tracks using a digital rights management (DRM) system limiting access to the tracks by for instance, only allowing the track to be played on a single machine without the ability of the track to be copied.

Windows Media Rights Manager (RTM) (WMRM) is such a known DRM system. In WMRM a media file may be packaged by encrypting the file with a key. This key may be stored in a license, which is itself may be encrypted and distributed separately to the package. A description of the WMRM system may be found on http://www.microsoft.com/windows/windowsmedia/howto/articles/drmarchitecture.aspx.

The package may then be freely distributed by for instance, being placed on a website for download by users. The media within the package may not be accessed without the key. The corresponding licenses (containing the encrypted keys) are stored and distributed by a clearinghouse license server. The role of the clearinghouse is to authenticate a user's request for a license. Requests may be automatically or manually sent from a user's machine when an attempt is made to access the package. Licenses are stored separately on the user's own machine or player. Only once a valid license has been acquired may the user access the media within the package. Furthermore, the key may remain encrypted and stored within a hidden section in the user's machine so that it cannot itself be freely distributed.

Usually, the key may only be decrypted by an individual user's machine.

However, the above system and similar DRM systems suffer from several limitations. The traditional promotional model is difficult to implement as the user only has the choice to buy the track outright without hearing it first (as they would have done on the radio, previously). Moreover, if the user has not heard the track before the promotional period ends they are less likely to purchase the track outright. They may even be tempted to download an illegal copy in order to try out the track by which point they may not be willing to purchase a legitimate copy at all.

Therefore, there is required a system and method that overcomes these problems.

Summary of the Invention

In accordance with a first aspect of the present invention there is provided a method for providing access to a media file comprising providing a media file, associating with the media file a first license granting access to the media file, associating a second license with the media file, responding to a request to access the media file before a predetermined date by delivering the first and second licenses such that access to the media file is granted and determining the presence of the second license after the predetermined date. The first license may be known as a play license and the second license may be known as a promotional license.

When responding to a request to access the media file before a predetermined date the first and second licenses

may be delivered such that access to the media file is granted. However, only the first or play license may be used to directly grant access. The second license may be used for control or monitoring the history of the media file with a user's machine. When responding to a request to access the media file after the predetermined date the request may be used to determine whether or not a second license has already been delivered. This may indicate that the user has already been granted access and so further access to the media file may be refused or denied. The second or promotional license may be present within a user's machine, for instance and the request may indicate this. The promotional license may allow the monitoring or control of access to the media file. The play license may provide access but a valid play license may only be delivered on request prior to a predetermined date. Such a play license may be returned to the user in exchange for some information relating to the user or the requested file, for instance. The period before the predetermined date may be known as a promotional period.

The promotional license or the request may contain any of: details of the requester, details of the media file and/or whether or not the media file has been accessed previously and how many times and/or for how long. The request may include details about the second or promotional license.

Furthermore, the delivery of the second or promotional license may indicate that access to the media file has been requested. The request may also contain additional information regarding what licenses are stored with the media file and whether or not any of these licenses have expired. This additional information may be related to the

media file, which may contain identifiers of the licenses required to monitor it.

The media file may be encrypted with an encryption key forming a packaged file. The play license may contain the corresponding decryption key for decrypting the packaged file so that access to the media file is granted when a valid play license is present. The promotional license may not contain a decryption key for decrypting the media file. Furthermore, the play license may expire at the end of the promotional period so that the decryption key becomes unavailable after the promotional period and access to the media file may be denied because there is no available valid license. Symmetric or asymmetric encryption may be used to encrypt the media file. In asymmetric encryption the media file may be encrypted with a public key and the play license may contain the corresponding private key.

A user wishing to access the media file may first download the packaged file or be sent it by another user. Other distribution techniques may be used such as email, for instance. There may be no existing licenses relating to this media file on a user's machine. Attempting to access the media file may result in a first license acquisition request being sent from the user's machine to a license store also known as a clearinghouse. The request may also indicate that no licenses exist on the user's machine for this particular media file. If the request is made before expiry of the predetermined date or within the promotional period the play license may be delivered, thereby allowing access to the media file. The second or promotional license may be delivered at the same time. The request may be made each time access to the media file is required or only when no valid play license may be found.

Preferably, if the user had already requested access within the promotional period they may have a stored play license but they may not be able to access the media file as the play license may have expired on or after the predetermined date. In this way, access to the media file after expiration of the promotional period may be restricted.

Each request for access issued may then be stored for monitoring purposes or to record which users have requested access to particular media files. In other words the clearinghouse may record all such requests both within and after the promotional period.

Advantageously, the first license may expire on the predetermined date. On expiration of the first or play license access to the media file may no longer take place.

Preferably, when the media file is encrypted the decryption key for decrypting the media file may be encrypted. The decryption key may be stored within the play license and may itself be encrypted for added security. Asymmetric encryption may be used to encrypt the media decryption key with a public key being used as the encryption key.

Optionally, the second or promotional license may be associated with the media file by a second license identifier stored within the media file. This may be contained with the packaged file.

Optionally, a third license may be associated with the media file. This third license may be known as a trial license. After the promotional period ends requests to access the media file may result in the trial license being issued. The trial and/or the promotional license may be issued automatically or only on request from the user.

Along with the trial license a fourth license may be issued. This fourth license may be a further play license or a re-issue of the first (play) license, allowing further limited or restricted access to the media file by, for example, allowing a limited number of playbacks or accesses to the media file, a limited quality of playback, a restriction on the type of player used to playback the media file, a restriction on the copying of the media file, a restriction on the transmission of the media file and/or accessing the media file for a limited period of time. The promotional license may also limit access in a similar way. The fourth license (or reissue of the play license) may contain a different or expanded set of rights to the media file.

Therefore, after the promotional period ends a trial period may commence and users may have further limited access to the media file. Users that missed the promotional period may then use the trial period to access the media file in a limited way for the first time.

Optionally, the third or trial license may be associated with the media file by a third license identifier stored within the media file or contained within the packaged file.

Advantageously, in response to a request to access the media file a second version of the first or play license having a different expiry date to that originally given and second version of the second or promotional license may be delivered. This may occur before, on or after the predetermined date. In other words, the predetermined date may be changed by issuing further license versions such that a new predetermined date is set thereby changing the promotional period. On receipt of the request to access the media file the license store or clearinghouse may query a

database in order to check if a newer version of the licenses are available. The second version of the second or promotional license may indicate that the promotional period has changed or that a new or later predetermined date exists for the particular media file.

Optionally, second versions of the third and/or fourth licenses may be issued having different levels of access. The access may be reduced or increased by for instance, changing the number of accesses or plays allowed before expiring.

The versions of licenses may be stored as expiry dates. A later expiry date may indicate a newer version. In this way the predetermined date or the promotional period may be changed for a particular media file.

Preferably, the decryption key may be encrypted within the first license. A fifth license may then be associated with the media file and the first license such that the fifth license contains a second decryption key for decrypting the encrypted key. The step of responding to a request to access the media file before the predetermined date may then further comprise the step of delivering the fifth license. In other words the play license may be separated into a root license, corresponding to the fifth license and a leaf licence corresponding to the first license.

Preferably, the fifth license expires after the predetermined date or may never expire or expire a long time in the future. Similarly, the promotional and/or trial licences may also be set to expire a long time in the future or never.

Versioning may also be used in which second and further versions of the leaf license may be issued with different expiry dates.

Preferably, a response to a request to access the media file may result in providing a permanent license such that access to the media file is granted. The permanent license may provide full rights to the media file. This may occur at any stage, either within the promotional period or trial period or after the trial period. In this way a user may purchase or otherwise obtain permanent or full rights to the media file. Pre-delivery of full or permanent license may also occur.

Optionally, a license store or clearinghouse may store occurrences of the deliveries of the first, second, third fourth and/or fifth licenses. This makes it possible to record how and when each user requests access to the media files. As these requests may also contain the identity of the user, once the promotional period expires the user may be contacted or prompted to obtain full rights to the media file. Additionally, the versions of each license delivered may also be stored. Such contact may be by email, for instance.

In a second aspect of the present invention there is provided a method of providing a media file comprising the steps of: providing a media file, allowing access to the media file up to a predetermined date, allowing restricted access to the media file after the predetermined date, whilst an access condition is met, and prohibiting access to the media file once the access condition is no longer met. The access condition may be for instance, that the media file has been accessed for less than a predetermined number of times. Therefore, the media file may be free to access

before the predetermined date or during a promotional period. The media file may then be accessed during a trial in a restricted manner after this predetermined date, for instance, it may be played three more times. After this trial, access may be prohibited unless or until the user obtains further or full rights to the media file.

Preferably, a user may obtain a media file package, attempt to access the media file or explicitly request access. If this request occurs within a promotional period or before a predetermined date a promotional license and a simple license may be delivered to the user. The simple license may not have expired before the predetermined date and so access to the media file may occur. After the predetermined date the promotion period may end.

Preferably, an optional trial license may be delivered after expiry of the promotional period but this may allow only limited access, for instance, such that a limited number of plays may occur. The number of plays may be recorded within the trial license or separately. Once this condition is met further requests may result in re-delivery of the trial license (or detection of presence of trial licence from the request) but as the promotional period will have expired and the condition of the trial already met, no further accesses to the media file may occur.

Advantageously, the licenses for all media files may be combined within a single area on the user's machine. Therefore, an attempt to delete the trial condition counter, which may be found within a play licence accompanying a trial license, may result in all of the user's licenses being deleted or corrupted resulting in a loss of access to all protected user media files. Furthermore, as the requests may be stored outside of the user's machine at for

instance, the clearinghouse repeated requests for a trial license may at some point be refused further limiting access to the media file.

Any of the above methods may be put into practice as a computer program or as a computer programmed to perform these method steps.

According to a third aspect of the present invention there is provided a digital rights management, DRM, system comprising: a media file, a first license associated with the media file and arranged to grant access to the media file before a predetermined date, and a second or more licenses (or a number or other "control" licenses) associated with the media file arranged to monitor access to the media file.

Brief description of the Figures

The present invention may be put into practice in a number of ways and embodiments will now be described by way of example only and with reference to the accompanying drawings, in which:

FIG. 1 shows a schematic diagram of a packaged media file and associated licenses, according to an embodiment of the present invention, given by way of example;

FIG. 2 shows a flow chart of a method of restricting access to a media file, given by way of example;

FIG. 3 shows a schematic diagram of a packaged media file and associated licenses, according to an alternative

embodiment of the present invention, given by way of example;

FIG. 4 shows a schematic diagram of the hardware required to distribute the packaged media and associated licenses of FIGs. 1, 2 and 3; and

FIG. 5 shows a flow chart of an alternative method of restricting access to a media file.

It should be noted that the figures are illustrated for simplicity and are not necessarily drawn to scale.

Detailed description of preferred embodiments

By way of example, the method may be put into practice in the following way.

The secure playback of media encrypted using WMRM is based on private/public keys encoded uniquely for an individual user's machine (a license). Content may be encrypted using a public key forming a media package, the private key of which may be present in a user's license store to enable a piece of media to be used. Details on how that content can be used may also be contained within a license. For instance, limiting the ability or number of copies of the media file that may be made or distributed.

The WMRM library contains a facility to query which licenses are present on a user's machine by embedding uplink ids within a piece of media. Uplink ids are license identifiers. Details on the current status of the uplinks may be returned as part of the license acquisition procedure (whereby a piece of media which does not have a valid

license requests a new license in order to continue playing). This enables a license server or clearinghouse to determine which subscription licenses have expired and thus only re-issue those licenses which are required to play that piece of media.

Figure 1 shows a schematic diagram of a set of components 10 residing on a user's machine (for instance, a computer such as a PC or Apple Macintosh (RTM)). Promotional license 20 and trial license 30 are defined as control licenses as they do not contain access rights or decryption keys directly linked to a media file but are used to maintain a process of granting or denying access to a media file 60. Promotional license 20 and trial license 30 have expiry dates a long time in the future so for all practical purposes they never expire. However, the actual expiry date may be used to maintain a versioning record of the licenses. This versioning will be discussed in detail below.

The promotional license 20 and trial license 30 may be associated with the media file by uplink ids, also known as licence identifiers. The promotional, trial and play licenses are created at the same time that the package 70 is created for later distribution.

Play license 40 is used to control access to the media file 60 and participate in decryption of a package 70. The media file 60 may be contained within the package 70 encrypted with a play decryption key.

Prior to the expiry date of the play license 40 the package 70 may be decrypted. However, after the expiry date the play decryption key contained within the play license 40 may no longer be available so that access to the media file ceases.

Figure 2 shows a flow chart 100 illustrating how access to a media file is controlled. This includes how the package 70 and licences 20, 30 and 40 are delivered to a user's machine.

In step 110 a media file package is obtained by a user. This may be by downloading the package from a website or by being sent the package from another user, for instance. The user may make a request to access the package by attempting to play a track, step 120.

Once an attempt to play the track is made a search for a valid play license may be made on the user's machine, step 123. A play license 40 must be present and in order to allow access to the media file, step 200. One way of checking the validity of a license is to check that it has not yet expired but other methods may be used.

If no valid play license is found a request for a valid license may be made by the user's machine or media player, step 125. Such a request may return to the clearinghouse details of the media file that may include its name, the user's identity or email address and the history of the media file on the user's machine or other occasions of requests made to access the media file. Such information may be recorded on the user's machine within a cookie, for instance. Such a request may be sent across a network such as the internet.

This information may also be requested directly from the user after the request is made. Alternatively, this information may be stored or retrieved from a cookie on the user's machine.

Such a request or its corresponding response may be explicit or silent in which case the user may be unaware that a request for any licenses have been made until access

to the media file or track is denied. The request may involve a request for a license being sent from the user's machine to a license clearinghouse or license server.

The clearinghouse may checks whether or not the promotional period for a particular media file has expired, step 130. If it is still within the promotional period a further check may be made to ensure that a promotional license 20 has not been issued, step 135. If a promotional license 20 has been issued (which may be known from the license request or otherwise) no play license 40 will be issued and so no further access will be granted, step 190.

If no promotional license 20 has been issued, the promotional license 20 and the play license 40 may be delivered to the user's machine, step 140 so that access to the media file is granted 200. However, the play license 40 may expire at the end of the promotional period. During the promotional period access to the media file may be granted and the user may play it, step 200 without any further license acquisition requests 125 being necessary.

After the promotional period the user has the option of trialling the media file. During this time the clearinghouse may check from the request whether or not a trial license 30 has been issued, step 150.

If no trial license 30 exists on the user's machine this may indicate that a trial has not yet taken place and that the user is still entitled to trial the media file 60. Therefore, the system checks whether or not a trial has taken place for this particular media file 60 and user combination, step 150.

The user may be provided with an option to either trial or purchase the media file, step 155. If the user selects to skip the trial and purchase the media file, step 165, a

full play license may be issued, step 180, and access to the media file may be made permanent.

If the user chooses to trial the media file, step 160, a trial license 30 and limited or restricted play license is issued, step 170. The limited play license may be restricted to a period of time before expiring or a limited number of plays (e.g. three times) or both. If the user chooses not to trial the media file they have no option but to purchase at that stage 145 as no valid play license 40 will be issued.

Should a user wish to restore a part of or an entire license store following a loss of data or migration to a new computer system the promotional and trial histories may be maintained as these licenses may also be restored. Therefore, restoration of the licenses may not enable the user to obtain a further free trial.

Figure 3 shows an alternative license structure 10' according to a further embodiment. In this alternative embodiment license chaining may be used instead of a simple single play license 40. Similar features have the same reference numerals.

Version 10 of the WMRM library has a license chaining feature, meaning that a chained series of licenses may all have to be present in order for a media file to be granted access. This feature was introduced to enable subscription services whereby a root license would expire at the end of the subscription period, thus rendering all leaf licenses invalid for use. The re-issue of the single root license may therefore re-enable the use of all subscribed to tracks. A leaf license may be tied to a root license by play uplink id.

In this alternative embodiment root license 300 and leaf license 340 replace a simple play license. The leaf license 340 contains the play decryption key, which is itself encrypted with public key 1 to form a key package 310. Leaf license 340 expires at the end of the promotional period. Root license 300 contains private key 1, which corresponds with public key 1 and decrypts the key package 310 so that play decryption key becomes available to decrypt the media file package 70. This license chaining embodiment may increase security of the media file and may also allow for other advanced features where the root license may itself be versioned via its expiry date. The root license 300, therefore, may expire a long time in the future so for all practical purposes never expires.

Figure 4 shows a schematic diagram of the hardware and network arrangement 400 used to distribute the media files and associated licenses from a media owner or distributor to the user according to the methods described above.

Package store 405 stores protected packages 70 for distribution. Clearinghouse 410 contains license store 415 containing licenses (promotional 20, trial 30 and play 40 or root 300 and leaf licenses 340) associated with each media file 60. Web server 420 receives requests for packages 70 and licenses originating from the user's machine 440. The packages 70 are returned to the user from the web server 420 on request.

Requests for licenses and media files are sent across a network 430, which may be an intranet or the internet. The licenses are transmitted to the user's machine 440 by the clearinghouse 410. Once a valid license has been received for a particular package 70 the media file may be accessed either within the user's machine 440 or transferred with the

relevant license to a portable device 450 containing suitable software to decrypt and access the media file 60.

As will be appreciated by the skilled person, details of the above embodiment may be varied without departing from the scope of the present invention, as defined by the appended claims.

For example, information regarding whether or not a license (promotional or trial) has already been issued for a user for a particular media file may be stored within the clearinghouse rather than contained within the license request.

The media file may be encrypted by a symmetric key instead of using asymmetric encryption. This may also be the case when license chaining is used.

Should a user attempt to re-enter the promotional period by changing the local machine date such a change may itself be logged within or corrupt the license store. This may then be used to deactivate all play licenses.

Although the embodiments of this invention have been described with respect to the WMRM system other DRM systems may be used, for example PlayReady supplied by Microsoft (RTM).

The user's machine may include a PC, Macintosh or portable computer. Other portable devices may be used to playback the media file such as, for instance a portable music player, smart phone, pda or vehicle audio system. The clearinghouse may contain a server, web server and database.

The media file may be for instance, a music file, audio file, streamed content, video, software, text or other media content.

At each stage a fee may be optionally levied for accessing the media file or for obtaining full rights.

Audio files may be in the MP3 format or similar. For instance, .wma or .wmv files may be used.

Although encryption of the media file is preferable other embodiments may be used in which the media file is not encrypted.

The chained license embodiment may be used to allow further rights for a particular media file to be granted. For instance, a play only right with one leaf license and a burn right with a subsequent leaf license.

The media file or media file package may originate from a second user to facilitate sharing of the content. However, the user wishing to access the media file may still be required to obtain valid licenses in the way previously described. The licenses (play, promotional and/or trial) may further specify whether or not such sharing is allowed

Figure 5 shows a flowchart of an alternative method of restricting access to a media file. This alternative method is similar to that shown by Figure 2. However, this alternative method has an additional step 142 (following test 130 of determining if the promo period has ended), "Has promo license been issued?", which gives someone who has previously received a promo license only the option to buy the product, therefore bypassing the option of a trial license to people who have previously listened to the track.

CLAIMS:

1. A method of providing access to a media file comprising the steps of:

providing a media file;

associating with the media file a first license granting access to the media file;

associating a second license with the media file;

responding to a request to access the media file before a predetermined date by delivering the first and second licenses such that access to the media file is granted; and

determining the presence of the second license after the predetermined date.

2. The method of claim 1 further comprising the step of denying access to the media file when the presence of the second license is positively determined.

3. The method of claim 1 or claim 2, wherein the media file is encrypted with an encryption key and the first license contains a decryption key for decrypting the media file.

4. The method of claim 3, in which the keys for encrypting and decrypting the media file are identical.

5. The method of claim 3, in which the encryption key is a public key and the decryption key is a corresponding private key.

6. The method of any previous claim, wherein the media file is associated with the second license using a second license identifier stored with the media file.

7. The method of any previous claim further comprising the steps of:

associating a third license with the media file;

associating a fourth license with the media file granting a restricted level of access to the media file; and

responding to a request to access the media file after the predetermined date by delivering the third license and fourth license such that access is granted.

8. The method of claims 7, wherein the restricted level of access is limited to a predetermined number of accesses to the media file such that once the predetermined number is reached access to the media file is denied.

9. The method of claims 7, wherein the restricted level of access is selected from the group consisting of: a limited quality of playback, a restriction on the type of player used to playback the media file, a restriction on the copying of the media file, a restriction on the transmission of the media file and accessing the media file for a limited period of time.

10. The method of any of claims 7 to 9, wherein the third and fourth licenses are delivered on request.

11. The method of any of claims 7 to 10, wherein the media file is associated with the third license using a third license identifier stored with the media file.

12. The method of any of claims 7 to 11, further comprising the step of responding to a request to access the media file by delivering a second version of the third license and a second version of the fourth license having a different level of access.

13. The method of claim 12, wherein the version of the third and/or fourth licenses are stored as expiry dates.

14. The method of any previous claim, wherein the presence of the second license is determined from a request to access the media file.

15. The method of any previous claim, wherein the first license expires on the predetermined date.

16. The method of claim 15 further comprising the step of responding to a request to access the media file by delivering a second version of the first license having a different expiry date and a second version second license.

17. The method of claim 16, wherein the second version of the first license has an expiry date later than the predetermined date.

18. The method of claim 16 or claim 17, wherein the version of the second license is stored as an expiry date.

19. The method of any of claim 2 to 18, wherein the decryption key is encrypted within the first license and further comprising the step of:

associating with the media file and the first license a fifth license containing a second decryption key for decrypting the encrypted key, and

the step of responding to a request to access the media file before the predetermined date further comprises delivering the fifth license.

20. The method of claim 19, wherein the fifth license is associated with the first license using a first license identifier.

21. The method of claims 19 or 20, wherein the fifth license expires after the predetermined date.

22. The method according to any of claims 19 to 21 further comprising the step of responding to a request to access the media file after the predetermined date by delivering a second version of the fifth license.

23. The method according to any of claims 19 to 21, wherein the second version of the fifth license has a later expiry date than the previous version.

24. The method of claim 22 or 23, wherein the version of the fifth license is stored as an expiry date.

25. The method according to any previous claim further comprising the step of responding to request to access the media file by providing a permanent license such that access to the media file is granted.

26. The method according to claim 25, wherein the permanent license provides full rights to the media file.

27. A method of providing a media file comprising the steps of:

providing a media file;

allowing access to the media file up to a predetermined date;

allowing restricted access to the media file after the predetermined date, whilst an access condition is met; and

prohibiting access to the media file once the access condition is no longer met.

28. The method of claim 27, wherein the access condition is: the media file has been accessed less than a predetermined number of times.

29. The method of claim 27 or claim 28 further comprising the step of providing permanent access to the media file.

30. The method of claim 29, wherein the permanent access includes full rights to the media file.

31. The method of any of claims 1-26, further comprising the step of storing the occurrences of the deliveries of each license.

32. The method of any of claims 1-26 further comprising the step of:

storing the history of each license together with the media file.

33. The method of claim 32, wherein the request to access the media file includes the stored history.

34. A computer program comprising program instructions that, when executed on a computer cause the computer to perform the method of any of the previous claims.

35. A computer-readable medium carrying a computer program according to claim 34.

36. A computer programmed to perform the method of any of claims 1 to 33.

37. A digital rights management, DRM, system comprising:

a media file;

a first license associated with the media file and arranged to grant access to the media file before a predetermined date; and

a second license associated with the media file arranged to monitor access to the media file.

38. The DRM system of claim 37, wherein the media file is encrypted with an encryption key and the first license contains a decryption key for decrypting the media file.

39. The DRM system of claim 38, in which the keys for encrypting and decrypting the media file are identical.

40. The DRM system of claim 38, in which the encryption key is a public key and the decryption key is a corresponding private key.

41. The DRM system according to any of claims 37 to 40, further comprising:

associating a third license with the media file;

associating a fourth license with the media file granting a restricted level of access to the media file; and

responding to a request to access the media file after the predetermined date by delivering the third license and fourth licenses such that access is granted.

42. The DRM system according to 41, wherein the restricted level of access is limited to a predetermined number of accesses to the media file such that once the predetermined number is reached access to the media file is denied.

43. The DRM system of any of claims 38 to 40, wherein the decryption key is encrypted within the first license and further comprising:

a fifth license associated with the media file and the first license the fifth license containing a second decryption key for decrypting the encrypted key.

44. The DRM system of claim 43, wherein the fifth license expires after the predetermined date.

45. A media player comprising the DRM system according to any of claims 37 to 44.

46. The method according to any of claims 1-26, 31 or 32, wherein if the second license has previously been associated with the media file and the predetermined date has passed access to the media file is denied.

47. The method according to claim 46 further comprising the step of providing an opportunity of purchasing access to the media file if the second license has previously been associated with the media file and the predetermined date has passed.

Fig. 1

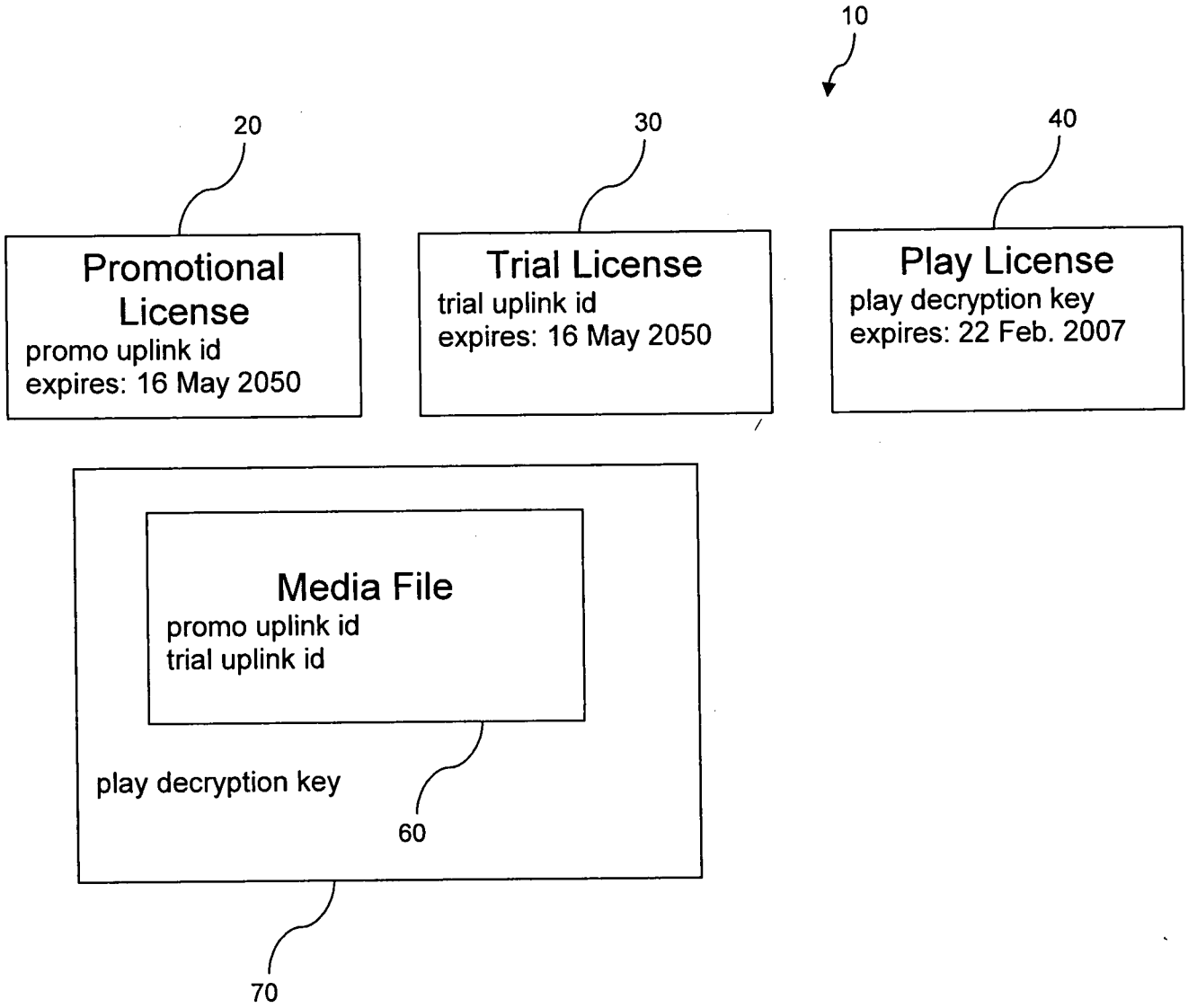

10
20
30
40
Promotional License
promo uplink id
expires: 16 May 2050
Trial License
trial uplink id
expires: 16 May 2050
Play License
play decryption key
expires: 22 Feb. 2007
Media File
promo uplink id
trial uplink id
play decryption key
60
70

Fig. 2

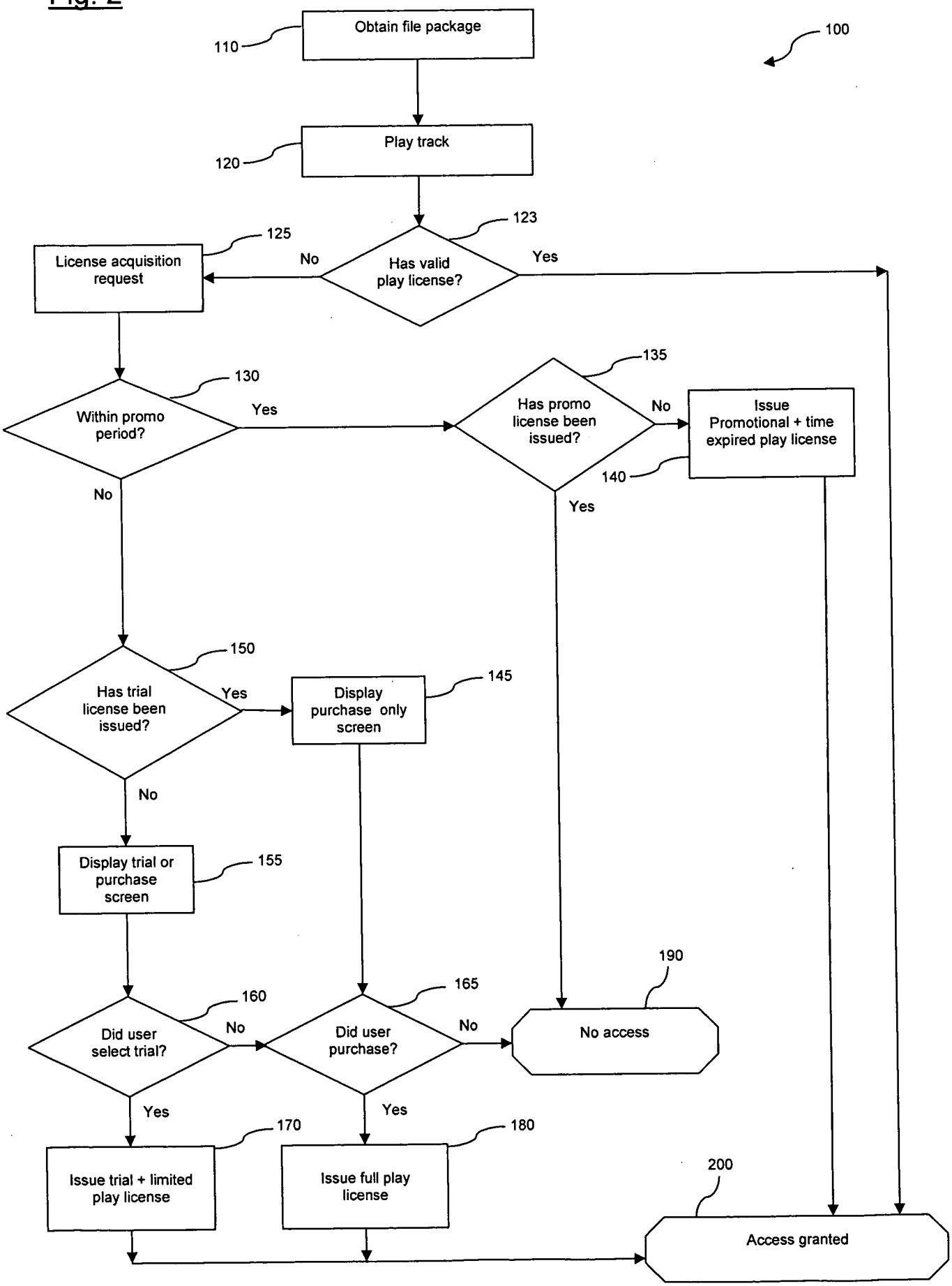

100
110
Obtain file package
120
Play track
123
Has valid play license?
No
125
License acquisition request
Yes
130
Within promo period?
Yes
135
Has promo license been issued?
No
Issue Promotional + time expired play license
140
No
Yes
150
Has trial license been issued?
Yes
145
Display purchase only screen
No
Display trial or purchase screen
155
160
Did user select trial?
No
165
Did user purchase?
No
190
No access
Yes
Yes
170
Issue trial + limited play license
180
Issue full play license
200
Access granted

Fig. 3

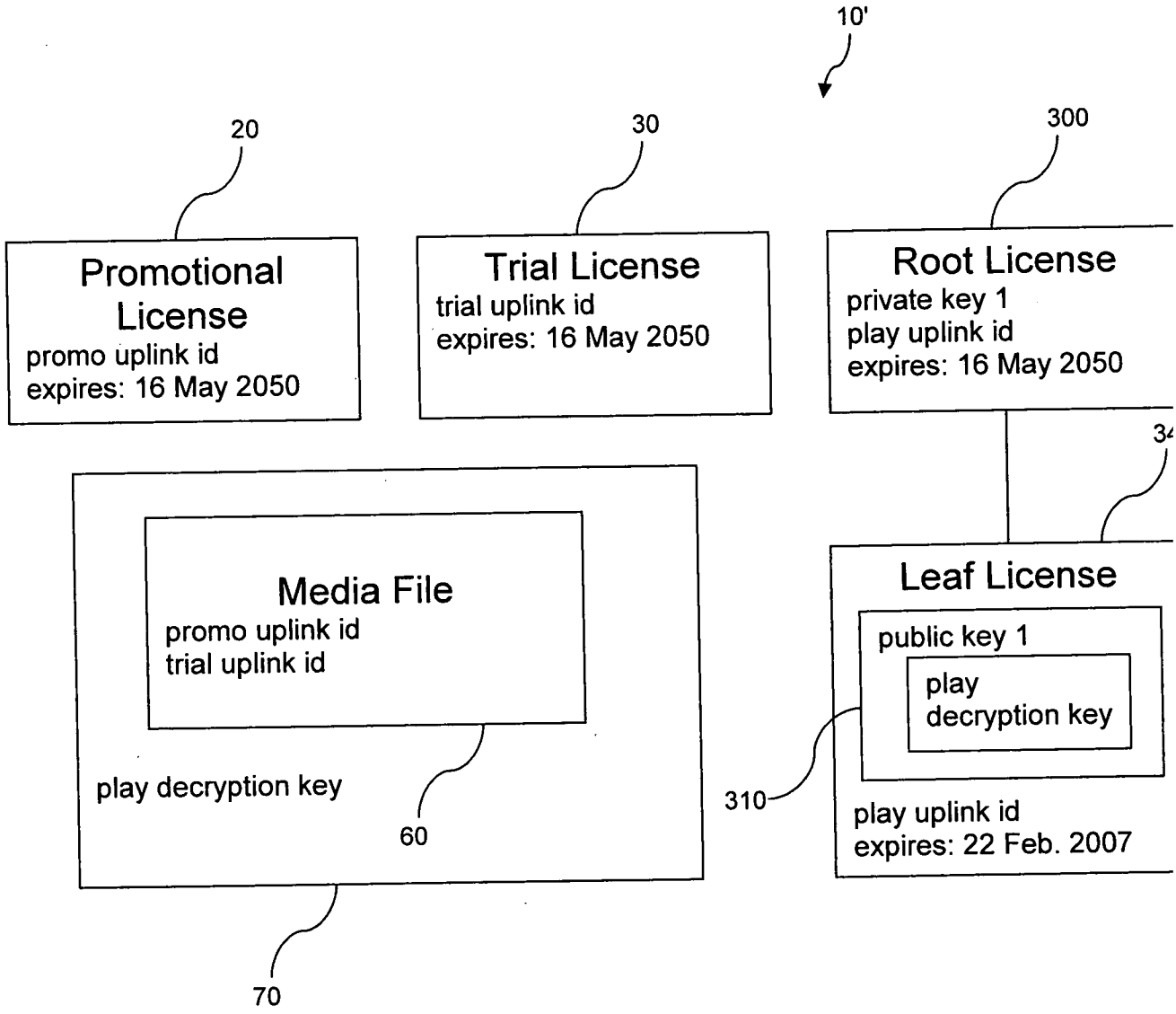

10'
20
30
300
Promotional License
promo uplink id
expires: 16 May 2050
Trial License
trial uplink id
expires: 16 May 2050
Root License
private key 1
play uplink id
expires: 16 May 2050
34
Media File
promo uplink id
trial uplink id
play decryption key
60
70
Leaf License
public key 1
play
decryption key
310
play uplink id
expires: 22 Feb. 2007

Fig. 4

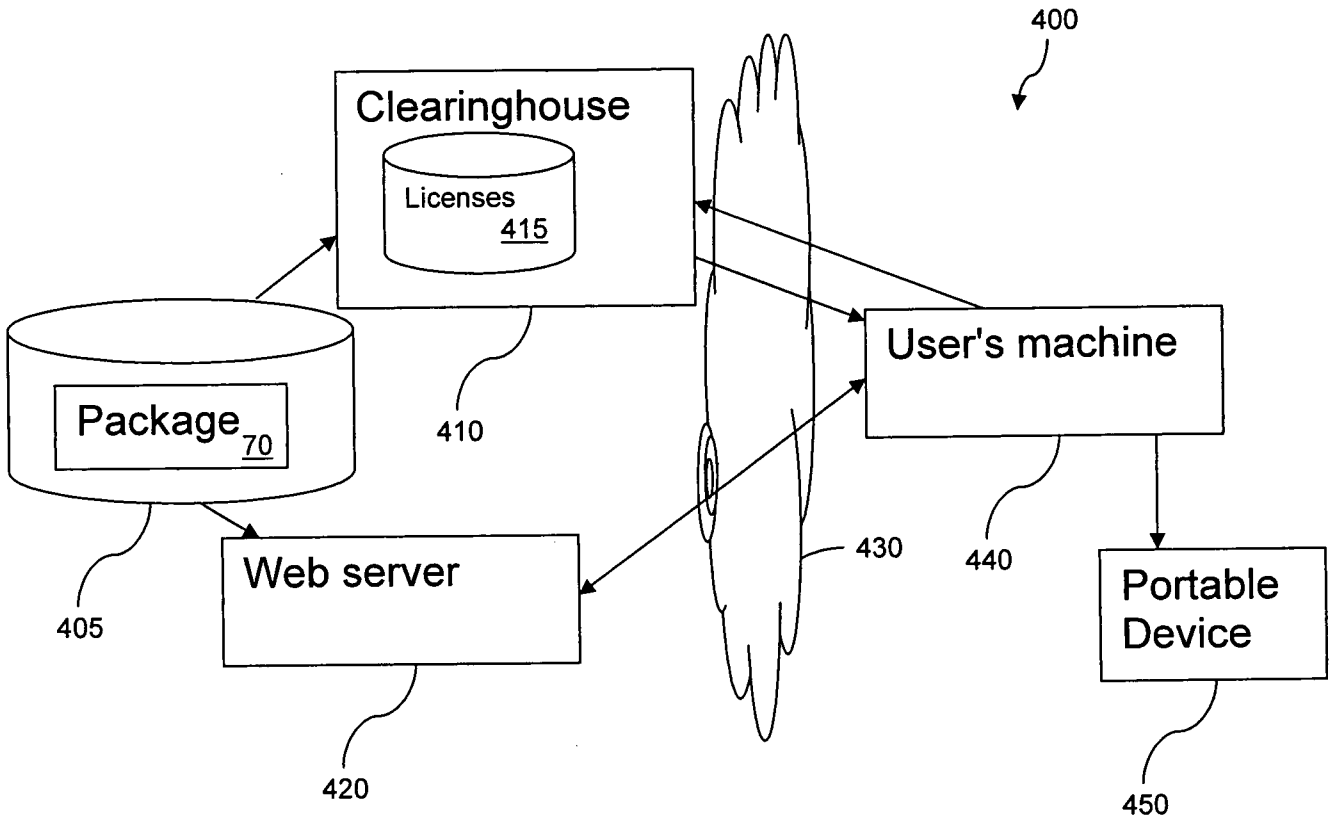
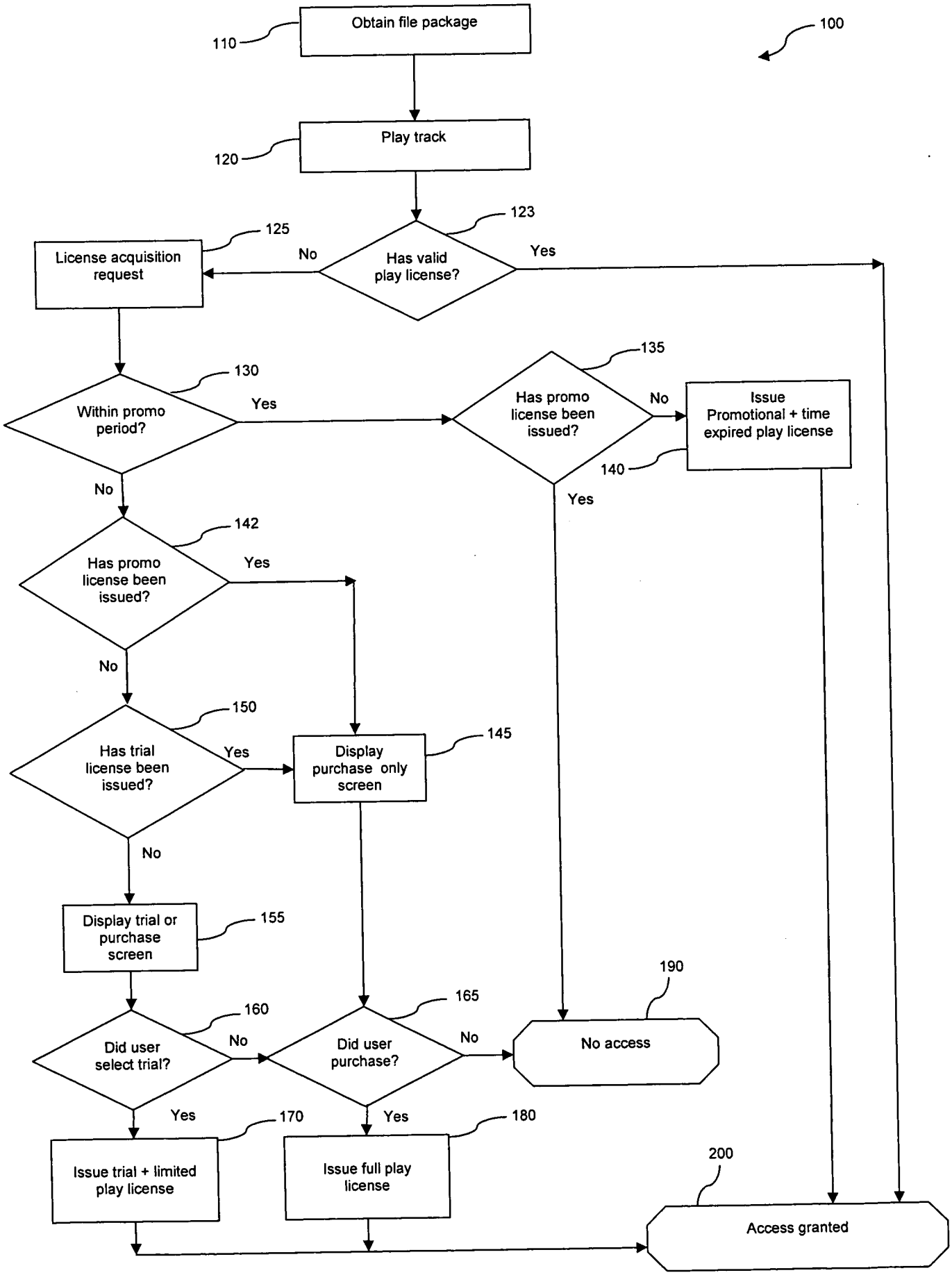

400
Clearinghouse
Licenses
415
410
Package
70
405
Web server
420
User's machine
430
440
Portable
Device
450

Fig. 5


Obtain file package
110
100
Play track
120
123
Has valid play license?
125
License acquisition request
No
Yes
130
Within promo period?
Yes
135
Has promo license been issued?
No
Issue Promotional + time expired play license
140
Yes
No
142
Has promo license been issued?
Yes
No
150
Has trial license been issued?
Yes
145
Display purchase only screen
No
Display trial or purchase screen
155
160
Did user select trial?
No
165
Did user purchase?
No
190
No access
Yes
170
Issue trial + limited play license
Yes
180
Issue full play license
200
Access granted