

**Internal distribution code:**

- (A) [ - ] Publication in OJ
- (B) [ - ] To Chairmen and Members
- (C) [ - ] To Chairmen
- (D) [ X ] No distribution

**Datasheet for the decision  
of 25 May 2022**

**Case Number:** T 2174/18 - 3.5.01

**Application Number:** 12171051.1

**Publication Number:** 2533185

**IPC:** G06Q30/00, H04N21/472,  
H04N21/433, H04N21/482,  
H04N21/81, H04N21/485

**Language of the proceedings:** EN

**Title of invention:**  
Remotely configuring content

**Applicant:**  
Comcast Cable Communications, LLC

**Headword:**  
Including a video recording option in advertisements/COMCAST

**Relevant legal provisions:**  
EPC Art. 56

**Keyword:**  
Inventive step - performing user authentication via service  
provider (no - non-technical policy)

**Decisions cited:**  
T 0641/00, T 1248/12



**Beschwerdekammern**

**Boards of Appeal**

**Chambres de recours**

Boards of Appeal of the  
European Patent Office  
Richard-Reitzner-Allee 8  
85540 Haar  
GERMANY  
Tel. +49 (0)89 2399-0  
Fax +49 (0)89 2399-4465

Case Number: T 2174/18 - 3.5.01

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.01**  
**of 25 May 2022**

**Appellant:** Comcast Cable Communications, LLC  
(Applicant) 1701 JFK Boulevard  
Philadelphia, PA 19103 (US)

**Representative:** V.O.  
P.O. Box 87930  
2508 DH Den Haag (NL)

**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 22 March 2018  
refusing European patent application No.  
12171051.1 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairman** W. Chandler  
**Members:** R. Moser  
C. Schmidt

## **Summary of Facts and Submissions**

- I. The case concerns the applicant's appeal against the examining division's decision to refuse European patent application No. 12171051.1.
- II. The examining division considered that the main and first auxiliary request were not compliant with Article 123(2) EPC and lacked an inventive step (Article 56 EPC) in view of US 2009/0241150 A1 (D1). The distinguishing features related to an advertisement arrangement which was well known, for example from US 2004/0215509 A1 (D4).
- III. In the statement setting out the grounds of appeal dated 20 July 2018, the appellant requested that the decision be set aside and that a patent be granted on the basis of the refused main or first auxiliary request filed on 15 January 2018, or a new second auxiliary request, all filed or re-filed therewith.
- IV. The Board issued a summons to oral proceedings. In the communication accompanying the summons under Article 15(1) RPBA, the Board gave its provisional opinion that none of the requests was inventive over D1 in combination with a conventional ad sever. Moreover, in the Board's view, neither the first nor the second auxiliary request met the requirements of Article 123(2) EPC.
- V. In a letter dated 31 March 2022, the appellant submitted further arguments in favour of inventive step and filed a third auxiliary request to overcome the objections under Article 123(2) EPC.

VI. Following the appellant's request oral proceedings were held as a videoconference on 25 May 2022. The Board decided to admit the third auxiliary request into the proceedings. As a consequence, the appellant withdrew the first and second auxiliary request and made the third auxiliary request the new first auxiliary request.

The appellant's final requests were that the decision under appeal be set aside and that a patent be granted on the basis of the main request, alternatively on the basis of the first (originally third) auxiliary request or a second auxiliary request filed during oral proceedings before the Board.

At the end of the oral proceedings the Chairman announced the Board's decision.

VII. Claim 1 of the main request reads:

"A method comprising:

providing, from a server to a plurality of display devices, an advertisement for display in a plurality of different content pages hosted by a plurality of different publishers;

determining, by the server, that one or more of the display devices is associated with one or more respective user accounts of a service provider that provides a service to each of the one or more user accounts;

in response to the determining, providing, from the server to the one or more display devices, a modification to the advertisement such that the advertisement, when modified by the modification, comprises an interactive control that, when selected at each of the one or more display devices, causes

instructions to be sent to the service provider to control the service for each of the one or more user accounts respectively."

VIII. Claim 1 of the first auxiliary request reads:

"A method comprising:

providing, from a server to a plurality of display devices, an advertisement for display in a plurality of different content pages hosted by a plurality of different publishers;

the advertisement comprising a request including a link to a computing device of a service provider, wherein the link includes a path that is associated with the server, for enabling a browser of a display device to perform a verification with the server via the service provider to confirm authentication of the display device;

based on the link, receiving, by the server, information that indicates one or more user accounts of the service provider, and indications of service options of the service provider available to each of the one or more user accounts;

based on the information, determining, by the server, that one or more display devices from the plurality of display devices is associated with the one or more user accounts;

in response to the determining and based on the indications, providing, from the server to the one or more display devices, a modification to the advertisement such that the advertisement, when modified by the modification, comprises an interactive control that, when selected at each of the one or more display devices, causes instructions to be sent to the service provider to control the service for each of the

one or more user accounts respectively."

- IX. Apart from a few minor changes, claim 1 of the second auxiliary request adds at the end of claim 1 of the first auxiliary request the features of claim 2 of the main request. These are:

"wherein the service provider is a video service provider, the service provided by the video service provider is a digital video recording service for remotely control [sic] recording of video programs, and wherein the interactive control displayed in the advertisement, when selected, causes an automatic configuration of the digital video recording service to schedule a recording of a video program advertised in the advertisement".

- X. The appellant's arguments can be summarised as follows:

D4 discloses a conventional ad server that passively provides pop-up advertisements based on user cookies - see paragraphs [0014], [0017] and [0020] to [0022]. The ad server of the invention, on the other hand, actively controls services offered by the service provider, e.g. a cloud based digital video recording service. Such service was new in 2011 when television and Internet were still largely separated worlds. It is not known from D1 which merely discloses a digital video recorder in connection with a set-top box.

The control of a digital video recording service requires a specific authentication, i.e. the identity and connection between the three parties involved, the third-party advertiser, the user and the service provider, has to be verified.

The inventive solution consists of a link to the service provider web server which includes a path associated with the ad server. The path represents a unique "box" for each ad server which provides and confirms to the service provider the connection between the user and the ad server - see paragraphs [0025] and [0026] of the published application. This enables the service provider to safely provide service options to the entitled ad server. At the same time the authentication data is hidden from the ad server.

The second auxiliary request essentially adds that the interactive control enables remote control of the recording of a video program in the cloud or a set-top box (button 103 in Figure 1). Such control requires that all parties are authenticated and authorised with the service provider. This is not possible in D4 where there is no such authentication between the ad server and the service provider. Furthermore, the invention is more flexible over D1 as it does not require the use of a plug-in and a set-top box. Also, by using information available to the service provider, e.g. the user's scheduled recordings, customisation of the advertisement can be improved (see paragraph [0028]).

## **Reasons for the Decision**

### 1. *Background*

- 1.1 The invention relates to targeted advertisements which make users aware of entertainment content without them having to discover it themselves (see paragraphs [0001] and [0002]).

Figure 1 shows a "content page" (myCITY TIMES) from a "publisher" web server (www.pub.zzz) displayed in a web

browser 100 on a user's computer. It has an advertisement 102 from a third party ad "server" targeted at gardeners on behalf of a (video) "service provider" that offers the TV series "Gardening" - see paragraphs [0010] and [0022].

The basic idea of the invention is that the third party ad server determines that a user is a customer of the service provider and customises an advertisement by adding an "interactive control" of functionality offered by the service provider. Thus, the third party server can provide the above mentioned advertisement 102 with a "RECORD NOW!" button 103 which automatically configures digital recording of the series via a digital video recording service offered by the (video) service provider - see paragraph [0012].

2. *Second auxiliary request, inventive step (Article 56 EPC)*
- 2.1 The Board comes to the conclusion that even the most limited second auxiliary request lacks inventive step (Article 56 EPC).
- 2.2 Claim 1 of this request specifies that the ad server determines that a user is a customer of the service provider by providing the advertisement with a "request including a link to a computing device of [the] service provider, wherein the link includes a path at the service provider that is associated with the server, for enabling a browser of a display device to perform a verification with the server via the service provider to confirm authentication of the display device" (see Figures 2 and 3: 214, 215A).

It also specifies that the interactive control causes



an automatic configuration of a digital video recording service to schedule a recording of a video program advertised in the advertisement.

- 2.3 In the latest reply, the appellant argued that the classic approach of targeted advertising, referred to by the Board in its preliminary opinion and exemplified by D4, was different from that of the invention.

The classic approach was based on two, not three, entities, namely an ad server and a user browser, which were in a one-to-one relation. Furthermore, starting from this framework, it was not obvious to implement the claimed authentication with the service provider via the browser, without user intervention (see points 11 to 14 of the reply).

- 2.4 In the Board's view, however, D4 discloses a system for providing targeted advertisements to a specific group of users which involves the same entities as the invention. Looking at Figure 1, these are an ad server 140, an advertiser 161, e.g. an online shop, a user device 101 and a publisher 131 (see paragraphs [0012] and [0017]).

When a user visits a publisher's web page the ad server retrieves a cookie stored on the user's device and determines whether it is on a target list of cookies (see paragraphs [0021] and [0022]). In other words, the ad server has for example a list of users registered with the online shop and determines whether the user is an authenticated, i.e. a registered user. If so, it serves a pop-up advertisement which includes clickable links for purchasing an item - see paragraphs [0017] and [0020].

In the Board's view it is clear that D4 also discloses the key element of the invention, namely that this targeting is in addition to the conventional advertising service, as it is disclosed as "icing on the cake" (see paragraph [0025]).

In summary, both in D4 and the invention the ad server receives user authentication status information and, based thereon, serves a specific advertisement. Authentication is performed by different entities, however, as discussed further below, this relates to a non-technical requirement.

2.5 The distinguishing features over D4 can be broken down into two groups representing different aspects of the invention:

(A) Authentication aspect: The user authentication is not performed by the third party advertiser, but by the service provider (via the link mentioned in section 2.2, above).

(B) Service aspect: The service provider is a video service provider, the service is a digital video recording service and the interactive control enables to remotely control recording of a video program (see section 2.2, above).

2.6 The appellant argued that there was a synergistic interaction between these features. The specific authentication via the service provider, linking together all three entities, was required to trust and enable the ad server to access service data and control the video recording service.

2.7 The Board is not persuaded by this argument.

Contrary to the appellant's view, the ad server in claim 1 is neither authenticated to the service provider nor does it control the video recording service. The link to the service provider including a path associated with the ad server (see lines 7 to 9 in claim 1 and the example in paragraph [0025]) merely indicates a specific web page of the service provider's web server. The Board can only assume that the reason for including this specific path is to inform the service provider which ad server is providing the ad. This is, however, part of the (business) agreement between the service provider and third party advertiser; the former needs to inform the latter which advertisements to customise and deliver to the user.

In view of the above, the Board considers that there is no synergistic relationship between (A) and (B). Their contribution to inventive step, therefore, has to be assessed separately and independently from each other.

2.8 It is common ground that the effect of difference (A) is that user authentication data is not provided to outside parties such as the third party ad server - see paragraph [0025] of the application.

2.9 This, however, relates to data privacy, i.e. what information to share and not to share with third parties, and thus is not a technical matter (see e.g. T 1248/12 - *Privacy preserving data mining/CROSSIX*, reasons 3.2). Under the "Comvik approach" (T 641/00 - *Two identities/COMVIK*) it may legitimately be part of the problem to be solved, for example in the form of a requirement specification given to the skilled person to implement.

In the context of D4 this would mean that the list of cookies, for example authentication cookies for an online shop, is not shared with or collected by the ad server (see paragraphs [0009] and [0021]). As a consequence, the ad server could not itself authenticate a user (see paragraph [0022]) but would need to get this information from elsewhere. The only other party which could perform user authentication is the one in possession of the cookies, i.e. the online shop.

Thus, in this situation the steps as in claim 1, namely authenticating the user via the service provider, i.e. the online shop, and providing authentication status information to the ad server are inevitable. The latter might also include, depending on the business agreement, information as to which advertisements to serve.

The Board judges that the technical implementation of this authentication procedure, e.g. by sending an authentication cookie via a web page request to the service provider's web server and using a specific path for indicating the originating ad server, would have been obvious to the skilled person, a web programmer.

- 2.10 Regarding difference (B) the appellant argued that the specific control enabled the user to schedule the recording of a video program via a digital video recorder (set-top box) or a cloud service in a convenient and flexible way.

This raised the awareness of the user regarding the availability of video programs/content (see paragraph [0001] and [0002] of the application). Even though D1

disclosed a video recording service, it required the installation of a browser plug-in and was limited to set-top boxes.

2.11 Firstly, the Board notes that adding a service option to an advertisement is a known concept. For example, the advertisements in D4 include a link for online shopping (see paragraph [0017]).

Secondly, D1 discloses the recording functionality as far as it is claimed - see paragraphs [0029] to [0031] since claim 1 is not limited to a specific implementation regarding the control of the digital video recording service, e.g. the use of a cloud service.

Thus the Board judges that, when asked to implement such a service option, the skilled person would have turned to D1 and arrived at the claimed solution without inventive effort.

3. *Main and first auxiliary request, inventive step (Article 56 EPC)*

3.1 Since claim 1 of the main and first auxiliary requests is broader than claim 1 of the second auxiliary request, they lack inventive step for the same reasons (Article 56 EPC).

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairman:



T. Buschek

W. Chandler

Decision electronically authenticated