

**Internal distribution code:**

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

**Datasheet for the decision  
of 20 January 2016**

**Case Number:** T 0861/11 - 3.5.06

**Application Number:** 01996161.4

**Publication Number:** 1397739

**IPC:** G06F9/00

**Language of the proceedings:** EN

**Title of invention:**

METHOD AND APPARATUS FOR RELATIONSHIP MANAGEMENT

**Applicant:**

Embrace Networks, Inc.

**Headword:**

Relationship management/EMBRACE NETWORKS

**Relevant legal provisions:**

EPC Art. 56

**Keyword:**

Inventive step - (no)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**  
**Boards of Appeal**  
**Chambres de recours**

European Patent  
Office  
D-80298 MUNICH  
GERMANY  
Tel. +49 (0) 89 2399-0  
Fax +49 (0) 89  
2399-4465

Case Number: T 0861/11 - 3.5.06

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.06**  
**of 20 January 2016**

**Appellant:** Embrace Networks, Inc.  
(Applicant) 950 Kifer Road  
Sunnyvale, CA 94086 (US)

**Representative:** Grund, Martin  
Grund Intellectual Property Group  
Nikolaistrasse 15  
80802 München (DE)

**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 10 December  
2010 refusing European patent application No.  
01996161.4 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairman** W. Sekretaruk  
**Members:** A. Teale  
Martin Müller

## Summary of Facts and Submissions

I. This is an appeal against the decision, dispatched with reasons on 10 December 2010, to refuse European patent application No. 01 996 161.4 on the basis that the amendments to claim 1 according to a main and a first auxiliary request did not comply with Article 123(2) EPC. A second and a third auxiliary request were not admitted, Rules 116(2) and 137(3) EPC, since the subject-matter of claim 1 of these requests *prima facie* did not involve an inventive step, Article 56 EPC, in view of the document

D1: Ryan Underwood, "To Connect and Serve, Silicon Valley upstart Embrace Networks has unveiled a system that Internet-enables any device, eliminating the need for costly 'one-off' solutions", "Publish", 24 April 2001, XP002206279, retrieved from the Internet on 16 July 2002 from URL [http://www.embracenetWORKS.com/news/news\\_2001-04-24.html](http://www.embracenetWORKS.com/news/news_2001-04-24.html)

either taken alone or in combination with other documents.

II. A notice of appeal was received on 10 February 2011 in which the appellant requested that the decision be set aside and a European patent granted. The appeal fee was paid on the same date.

III. With a statement of grounds of appeal, received on 13 April 2011, the appellant submitted amended claims according to a main and first and second auxiliary requests. The appellant requested that the decision be set aside and that a European patent be granted on the basis of the claims according to the main or first or

- second auxiliary request and the description and drawings on file, otherwise oral proceedings were requested.
- IV. In an annex to a summons to oral proceedings the board expressed doubts *inter alia* as to whether the subject-matter of claim 1 of all requests on file involved an inventive step, Article 56 EPC 1973, in view of D1. In particular, the board questioned whether the difference features between the subject-matter of claim 1 of all requests and the disclosure of D1 solved a technical problem and thus could contribute to inventive step.
- V. With a letter received on 18 December 2015 the appellant filed amended claims according a main and first to third auxiliary requests together with amended pages of the description.
- VI. At the oral proceeding held on 20 January 2015 the appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request, or one of the auxiliary requests I, II or III, all filed with the letter of 18 December 2015.
- VII. The description pages on file for all requests are pages 1 to 5 and 17, received on 18 December 2015, page 4a, received on 13 March 2006, and pages 6 to 16, received on 12 October 2005.
- VIII. The drawings on file for all requests are pages 1 to 7, as originally filed.
- IX. At the end of the oral proceedings the board announced its decision.
- X. Claim 1 according to the main request reads as follows:

"1. A method of managing a relationship between a device and a service provider comprising:

receiving at a service aggregator (320;508) a first information from the device (310;502),

wherein the first information received at the service aggregator (320;508) is selected from the group consisting of device attribute information, branding information, account information, device serial number information, type of device information, application information, and last time used information, and

wherein the service aggregator (320;508) has information about one or more service providers and the service aggregator is configured to select a specific service provider from the one or more service providers for the device based on the first information; and

transmitting a second information from the service aggregator (320;508) to the device (310;502) directing the device (310;502) to communicate with the specific service provider (330;506), the second information being based on the first information received from the device."

- XI. Claim 1 according to the first auxiliary request only differs from that according to the main request in that, in the transmitting step, the expression "directing the device (310;502) to communicate with the specific service provider (330;506)" has been amended to read "directing the device (310;502) to **directly** communicate with the specific service provider (330;506)" (emphasis by the board).

XII. Claim 1 according to the second auxiliary request reads as follows, the additions and deletions vis-a-vis claim 1 of the main request being indicated in **bold** or ~~struck through~~, respectively:

"1. A method of managing a relationship between a device and a service provider comprising:

receiving at a service aggregator (320;508) a first information from the device (310;502),

wherein the first information received at the service aggregator (320;508) is selected from the group consisting of device attribute information, branding information, account information, device serial number information, type of device information, application information, and last time used information, and

**wherein the service aggregator (320;508) communicates the first information to a relation manager (510) which then communicates to the service aggregator (320;508) a user choice sent from the device and stored in the relation manager (510), and**

wherein the service aggregator (320;508) has information about one or more service providers and the service aggregator is configured to select a specific service provider from the one or more service providers for the device based on the first information **and the user choice**; and

transmitting ~~a~~ **the** second information from the service aggregator (320;508) to the device (310;502) directing the device (310;502) to communicate with the specific service provider (330;506), the second information being

based on the first information **and user choice** received from the device."

XIII. Claim 1 according to the third auxiliary request only differs from that according to the second auxiliary request in that, in the transmitting step, the expression "directing the device (310;502) to communicate with the specific service provider (330;506)" has been amended to read "directing the device (310;502) to **directly** communicate with the specific service provider (330;506)" (emphasis by the board).

XIV. The claims according to each of the main and first to third auxiliary requests also comprise an independent claim 18 to a computer-readable medium referring to the method of claim 1 and an independent claim 19 to an apparatus setting out steps according to any of claims 1 to 17.

### **Reasons for the Decision**

1. The admissibility of the appeal

In view of the facts set out at points I to III above, the appeal complies with the admissibility criteria under the EPC and is therefore admissible.

2. The context of the invention

2.1 The technical disclosure of the invention starts at paragraph [0038] after numerous statements (see paragraphs [0031] to [0037]) broadening its interpretation. The invention relates to the use of a "service aggregator" to manage the relationships between



electronic devices (such as a digital camera; see [0043]) and one or more service providers via a network such as the Internet, a LAN or a wireless network. According to figure 1 and its description (see paragraph [0040]), clients are connected via the network to servers acting as web sites, application service providers, aggregators, search engines or database resources. Figure 2 and its description (see paragraphs [0039], [0041] and [0042]) disclose a personal computer suitable for acting as one of said clients or servers. As illustrated in figure 3, bidirectional communication can occur between each of a device, a service aggregator and a service provider, it being clear from the description that such communication may occur via the Internet; see paragraph [0043]. The device can be a handheld digital camera linked to the service aggregator and the service provider via a "USB to Ethernet to DSL modem to Internet type connection". The service provider may be a web site portal for the upload of pictures from the device and may communicate with the service aggregator via the Internet. The camera may have a display and a keyboard for user input; see paragraph [0044]. The service aggregator may send a series of options to the device for user selection, one option being to upload pictures to the service provider, as above. Other options allow the device to communicate with a service provider which can print photos received from the device, allow pictures to be uploaded to a group picture viewing web site or allow pictures to be printed and sent by post to recipients.

- 2.2 The options presented to the device by the service aggregator can be based on information received from the device and on information regarding the services provided by the service provider; see paragraph [0045]. There may be several service providers which receive

pictures, print them and mail them back to the user, and the user can already have accounts set up with different service providers or can use the device to set up a new account with a service provider (see paragraph [0046]).

- 2.3 The information received from the device can be, for instance, device attribute information, branding information, account information, device serial number information or application information; see paragraph [0047].
- 2.4 Figure 4 illustrates "relationship management" in the context of communication between a device and a relationship manager, which *inter alia* checks whether an update is available for the device; see paragraphs [0049] and [0050]. As shown in figure 5, a relationship manager (RM), service aggregator (SA), several service providers and several devices can all be connected via a network to form an "environment for relationship management"; see paragraphs [0051] to [0053]. According to paragraph [0052], the environment operates as follows. A device may automatically communicate information about itself to the service aggregator, which communicates information about the device to the relationship manager. The relationship manager communicates to the service aggregator choices to send to the device. The user then uses the device to make a choice. The service aggregator receives the user choice from the device and conveys this to the relationship manager for storage. The relationship manager upon receiving and registering the choice sends the service aggregator information to communicate to the device. This information "may instruct the device to communicate directly with the appropriate service provider" to provide services based upon the user's choice; see paragraph [0052], last sentence.

3. The meaning of the terms "direct" and "directly"
  - 3.1 In the grounds of appeal the appellant argued that the transmitting step in the last paragraph of claim 1 of the requests then on file was to be understood as being limited to direct communication between the device and the service provider in the sense that there was no intervening network.
  - 3.2 In its preliminary opinion the board questioned this position, pointing out that claim 1 of all requests did not limit the communication between the device and the specific service provider to "**direct**" communication. Indeed the original application provided no basis for assuming that the device, for instance a handheld digital camera, could be "directly" connected to the service provider. Claim 1 covered communication between the device and the service provider occurring via an intervening network such as the Internet; see figure 3 and page 12, lines 7 to 8.
  - 3.3 According to the submission of 18 December 2015, the appellant had not intended to argue that "direct" communication between the device and the service provider was performed in the absence of any communication network. The appellant had instead intended to argue that the device did not need to communicate via special-purpose network components, in particular the service aggregator or the relation manager. In the oral proceedings the appellant argued that the expression in claim 1 according to the first and third auxiliary requests "directing the device ... to **directly** communicate with the specific service provider ..." (emphasis by the board) should be understood to mean that communication between the device

and the specific service provider did not pass via the service aggregator, or in the case of the third auxiliary request, via the relation manager. According to the appellant, the basis for this interpretation was the last sentence of paragraph [0052] (corresponding to paragraph [0035] of the original application) which states, referring to the embodiment shown in figure 5, that "This information may instruct the device to communicate directly with the appropriate service provider ... to provide services based upon the user's choice".

- 3.4 Regarding claim 1 according to the main and second auxiliary requests, which do not use the term "directly" in the transmitting step, the board finds that the path taken by communication between the device and the specific service provider is not specified by the claim, either on its own or when understood in the light of the description and drawings. Regarding claim 1 according to the first and third auxiliary requests, the board finds that the term "directly" in the context of communication via a network such as the Internet has no limitative effect and certainly does not exclude communication passing via the service aggregator or the relation manager. There is also no mention in the description and figures of reducing the computing load on the service aggregator. In the context of the application the board understands the term "directly" as meaning "without the need to repeat the selection step".

4. The meaning of the term "directing" in claim 1

In the oral proceedings the appellant argued that the term "directing" in the expression "directing the device to communicate with the specific service provider ..." meant that communication must actually occur between the device and the service provider. The board does not accept this argument, understanding this part of claim 1 as such, and also when understood in the light of page 15, lines 19 to 20, of the description, to mean that the device is given information about which service provider has been selected for the client to communicate with. The claim does not imply that the client uses this information to communicate with the service provider or how. Hence the board finds that the claim does not require that the client use this information at all.

5. Document D1

5.1 According to its title, D1 concerns Internet-enabling devices, the technology (developed by the appellant) "handling all the details to consummate the needed 'handshake' between a device and a service provider"; see the 6th paragraph starting "Now a company ..." In the case of an Internet-enabled digital camera, pictures can be sent directly from the camera via the Internet to a website; see 8th paragraph, starting "Take the example ..." D1 states that "... just send the pictures straight to whatever Web site you wanted them to go". In this way, the system known from D1 avoids the need to first upload the pictures to a computer and from there to a website. It is stressed that "We want there to be no need for manual intervention". According to the penultimate paragraph, the "Embrace Network system" combines two elements. The first is the client-side hardware and software that controls access between the device and the network, which the board understands to be the Internet. The second element consists of the

server application that controls communication between the network and a service provider. As the appellant has argued, in D1 communication between the camera and the service provider passes through the server application.

5.2 The appellant argued in the oral proceedings that in D1 the device did not have to know the location of the selected service provider, since it always communicated via the server application as an intermediate unit.

5.3 Hence, in terms of claim 1 of the main and first, second and third auxiliary requests, D1 discloses a method of managing a relationship between a device and a service provider, the device communicating with the service provider.

5.4 The subject-matter of claim 1 of the main request differs from the disclosure of D1 in the following features. As will be explained below, the difference features can be grouped into features "a" and "b", as follows:

- a. receiving at a service aggregator a first information from the device, wherein the first information received at the service aggregator is selected from the group consisting of device attribute information, branding information, account information, device serial number information, type of device information, application information, and last time used information, and wherein the service aggregator has information about one or more service providers and the service aggregator is configured to select a specific service provider from the one or more service providers for the device based on the first information; and

- b. transmitting a second information from the service aggregator to the device directing the device to communicate with the specific service provider, the second information being based on the first information received from the device.

6. Inventive step, Article 56 EPC 1973

6.1 The main request

- 6.1.1 The appellant has argued that, although the difference features set out elements which were known *per se*, it was their combination that was inventive. According to the appellant, at the filing date, there was a "major trend" towards connecting devices having limited computing ability to the Internet and it was becoming important to enhance the capabilities of such devices, especially when multiple service providers had to be contacted by the device to access new features and services. The invention solved the objective technical problem of "how to manage relationships of a device having limited computing resources in order to provide improved functionality to said device via the Internet". Based on information from the device and a response from the service aggregator, the device then contacted the selected service provider without an "intervening network" (which, in the light of the appellant's subsequent arguments, the board now understands to mean "without passing via the service aggregator or the relation manager"). The appellant also argued that the invention did not require the device to have the computing resources necessary to create or register user profiles.

- 6.1.2 In the submission of 18 December 2015 the appellant argued that the transmitting step in claim 1 involved transmitting a second information to the device directing it to communicate with the service provider. Hence the difference features over D1 solved the technical problem of providing an improved method of managing a relationship between a device and a service provider allowing a reduction in the number of computationally expensive input/output operations with the user. Moreover, the computational load on the service aggregator was reduced, since, according to the transmitting step in claim 1, communication of the device with the service prover did not pass via the service aggregator.
- 6.1.3 In the oral proceedings the appellant argued that the invention reduced the need to enter data or search on a simple Internet-enabled device to select a service provider by using a service aggregator to, based on information from the device, select a service provider and send information on the chosen service provider to the device. The invention did not merely automate human activity, since a user would not select a service provider in this way. Moreover, according to the invention, once the service aggregator had selected the service provider, it was no longer involved in communication between the device and the service provider, thereby reducing the computing load on the service aggregator. The invention also had the advantage that the device did not need to store details of all the available service providers.
- 6.1.4 As explained above, the board does not understand claim 1 as excluding that communication of the device with the service provider passes via the service aggregator. The board finds that features "a" and "b", set out above,



solve different problems, there being no synergistic effect.

6.1.5 Regarding feature "a", D1 does not indicate how the service provider is selected, although there is a hint at some sort of selection in the eighth paragraph which states "send your pictures straight to whatever Web site **you wanted** them to go to" (emphasis by the board). In the oral proceedings the appellant's representative stated that, in his understanding of D1, the server application might provide such a selection service. The board finds that this is not directly and unambiguously derivable from D1. Feature "a" solves the technical problem of automating selection of the service provider, in itself an obvious problem for the person skilled in the computing art starting from D1. The types of first information set out in the claim, for instance device attribute information, upon which the selection is based do not result in the solution of a technical problem going beyond the automation of the selection. It would moreover have been a usual matter of design to implement this selection at a server, a server already being known from D1 (see penultimate paragraph), which can be considered to be the claimed service aggregator, based on information from the device as a usual matter of design. The skilled person would also have been disinclined to store information on all the possible service providers in the camera of D1 in view of its limited memory capacity and the need to update such information in all the devices which are to be connected to the Internet.

6.1.6 In the oral proceedings the appellant had no further comments regarding feature "a", choosing to focus on feature "b" instead.

- 6.1.7 The appellant has argued that feature "b" gives the device the potential to communicate with the service provider and that this is sufficient to solve a technical problem. The board does not accept this argument and finds that in the present case, where communication between the device and a service provider need not occur, a communication problem is not solved.
- 6.1.8 The appellant has also argued that feature "b" solves the problem of reducing the load on the service aggregator because it is only involved initially in enabling the device to communicate with a selected service provider and from then on is no longer involved in such communication. The board does not accept this argument because there is no direct and unambiguous disclosure in the original application that subsequent communication does not pass via the service aggregator, nor is a reduction in the load on the service aggregator even hinted at. Also claim 1 does not exclude communication between the device and the service provider passing via the service aggregator.
- 6.1.9 Hence claim 1 leaves open whether the device acts on the received information to communicate with the selected service provider and, even if the intended communication did take place, it would not achieve the alleged load reduction on the service aggregator. As the appellant has not put forward any other technical problem solved by feature "b" and the board is not aware of any itself, it must be concluded that feature "b" does not solve a technical problem.
- 6.1.10 The board finds that the subject-matter of claim 1 of the main request lacks inventive step, Article 56 EPC 1973, in view of D1 and the common general knowledge of the skilled person.

6.2 The first auxiliary request

Since, as explained above, the board regards the term added to claim 1 "directly" as having no limitative effect in this context, the subject-matter of claim 1 of the first auxiliary request lacks inventive step, Article 56 EPC 1973, for the same reasons as set out for the main request.

6.3 The second auxiliary request

6.3.1 Claim 1 differs from that of the main request in the addition of the following passage:

"wherein the service aggregator (320;508) communicates the first information to a relation manager (510) which then communicates to the service aggregator (320;508) a user choice sent from the device (310;502) and stored in the relation manager (510), and"

and in that in the penultimate paragraph the service aggregator is now configured to select a specific service provider "based on the first information **and the user choice**" (emphasis by the board). Likewise in the transmitting step in the last paragraph the second information transmitted from the service aggregator to the device is "based on the first information **and user choice** received from the device" (emphasis by the board).

6.3.2 The appellant has argued, regarding a previous version of the claim, that the references to a "relation manager" and a "user choice" emphasize the relationship management aspects of the invention.

- 6.3.3 The board understands the added features in the light of paragraph [0052] of the description to mean that first, based on information about the device, the device user is presented with choices and makes a choice which is stored in the relation manager; see page 15, lines 14 to 19. Then the relation manager, based *inter alia* on the user choice, sends the service aggregator informant to pass on to the device enabling it to communicate with the appropriate service provider.
- 6.3.4 In the submission of 18 December 2015 the appellant argued, regarding the second and third auxiliary requests, that the claimed "direct" communication between the device and the service provider not only avoided the service aggregator but also the claimed relation manager. In the oral proceedings the appellant also argued that the relationship manager increased the flexibility with which the user could enter data.
- 6.3.5 Compared to claim 1 of the main request, the effect of the amendments is that the selection of a service provider depends not only on information about the device, which may be branding or account information, but also on a user choice, the nature of this choice not being disclosed in the description and drawings or specified in claim 1. The amendments also specify that a further server, termed the "relation manager", is provided for storing user choices.
- 6.3.6 The board finds that these additional features are unable to lend inventive step to claim 1. As regards their effect on difference "a" (see main request), the board considers it obvious in view of D1 ("whatever Web site you wanted it to go") that the choice of the service provider is made partly dependent on the user's choice. It could, for instance, concern account

preferences, such as "Do you wish to use the camera manufacturer's default photo web site?". The addition of the user choice to feature "a" does not cause a technical problem going further than automating selection of the service provider to be solved. Also the provision of storage for such user choices is regarded as a usual design choice for the person skilled in the computing art. The board can find no basis in the original application for the appellant's assertion that the relationship manager increases the flexibility with which the user can enter data. Turning to difference "b", the fact that the information sent to the device enabling it to communicate with the service provider depends in some way on a non-specified user choice does not lend it technical character and thus does not cause it to contribute to inventive step.

6.3.7 Hence the board finds that the subject-matter of claim 1 according to the second auxiliary request lacks inventive step, Article 56 EPC 1973, in view of D1 and the common general knowledge of the skilled person.

6.4 The third auxiliary request

6.4.1 Since, as explained above, the board regards the term added with respect to claim 1 of the second auxiliary request "directly" as having no limitative effect in this context, the subject-matter of claim 1 of the third auxiliary request lacks inventive step, Article 56 EPC 1973, for the same reasons as set out above for the second auxiliary request.

**Order**

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

The appeal is dismissed.

The Registrar:

The Chairman:



B. Atienza Vivancos

W. Sekretaruk

Decision electronically authenticated