

Internal distribution code:

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

**Datasheet for the decision
of 6 September 2016**

Case Number: T 0774/14 - 3.5.05

Application Number: 08865741.6

Publication Number: 2232776

IPC: H04L12/28, H04L12/26, H04L29/06

Language of the proceedings: EN

Title of invention:
Monitoring of network connections

Patent Proprietor:
BRITISH TELECOMMUNICATIONS public limited company

Opponent:
Adaptive Spectrum and Signal Alignment, Inc.
(until 30 September 2015)

Headword:
Estimating resynchronisations/BT

Relevant legal provisions:
EPC Art. 56, 100(a), 111(1)
RPBA Art. 12(4)

Keyword:

Inventive step - main request (no)

Admission of first auxiliary request - (yes): appropriate
reaction to clarity objection raised in opposition proceedings

Remittal to first instance for further prosecution - (yes)

Decisions cited:



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 0774/14 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 6 September 2016

Appellant: BRITISH TELECOMMUNICATIONS public limited
(Patent Proprietor) company
81 Newgate Street
London
EC1A 7AJ (GB)

Representative: Kazi, Ilya
Mathys & Squire LLP
The Shard
32 London Bridge Street
London SE1 9SG (GB)

Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted on 4 March 2014
revoking European patent No. 2232776 pursuant to
Article 101(3) (b) EPC.

Composition of the Board:

Chair A. Ritzka
Members: K. Bengi-Akyuerek
G. Weiss

Summary of Facts and Submissions

I. The appeal of the patent proprietor is against the decision of the opposition division to revoke the present European patent on the grounds that the subject-matter of claim 1 as granted did not involve an inventive step (Articles 100(a) and 56 EPC) and that the claims of the then first and second auxiliary requests, submitted for the first time at the oral proceedings before the opposition division, were not admissible under Rules 80 and 116(1) EPC (in conjunction with Articles 84 and/or 123(2) EPC).

By way of an *obiter dictum* under the heading "Additional Remark", the opposition division, in view of the invoked opposition ground of insufficiency of disclosure (Articles 100(b) and 83 EPC), also expressed its opinion that the patent fulfilled the requirements of Article 83 EPC.

II. The prior-art documents cited by the opponent in the opposition proceedings included the following:

- A1:** WO-A-2006/103557;
- A2:** T. Bostoën et al.: "Optimizing DSL for multimedia services", Alcatel Telecommunications Review, pp. 155-159, 2005;
- A9:** US-B-6 782 884.

III. With the statement setting out the grounds of appeal, the appellant filed amended claims according to eighteen auxiliary requests (auxiliary requests 1 to 4 with variants a, b and i to iii). It requested that the decision under appeal be set aside and that the patent be maintained on the basis of the claims as granted (main request) or on the basis of the amended claims

according to one of the auxiliary requests.

- IV. With its letter of reply, the then respondent requested that the appeal be dismissed and that the patent as granted or as amended be revoked basically on the grounds of lack of novelty and inventive step, added subject-matter, insufficiency of disclosure and lack of clarity.
- V. By a letter dated 30 September 2015, the respondent withdrew its opposition and announced that it would no longer be participating in the present appeal proceedings.
- VI. In an annex to the summons to oral proceedings pursuant to Article 15(1) RPBA, the board expressed its preliminary opinion on the appeal. In particular, it made observations regarding the question of novelty and inventive step (Articles 54 and 56 EPC) having regard to A1, A2 and A9, and the admissibility of the newly filed auxiliary requests.
- VII. By a letter of reply, the appellant re-filed the claims as granted (main request) and submitted new sets of claims as first and second auxiliary requests replacing the former ones.
- VIII. Oral proceedings were held on 6 September 2016 with the appellant only, during which the allowability of the main request and the admissibility of the first auxiliary request were discussed.

The appellant's final request was that the decision under appeal be set aside and that the patent be maintained as granted (main request) or in amended form on the basis of the first and second auxiliary requests

filed with letter dated 5 August 2016.

At the end of the oral proceedings, the decision of the board was announced.

IX. Claim 1 of the **patent as granted (main request)** reads as follows:

"A method of operating an access network including a plurality of data connections (19) between end user devices (14) and an aggregation transceiver device (20) where the connections (19) are aggregated for onward connection through the access network, the method comprising:

storing a plurality of different profiles, each of which specifies a set of values for a plurality of parameters associated with each data connection (19); and, for each data connection (19),

monitoring the performance of the connection (19);

selecting one of said stored profiles to be applied to the connection (19) in dependence on the results of monitoring the connection (19); and

applying the selected profile to the data connection (19);

characterised in that monitoring the connection (19) includes determining or estimating the number of times that the connection (19) resynchronises, within a given period of time, as a result of an automatic or forced resynchronisation rather than as a result of user action and using the determined or estimated number of forced resynchronisations, discounting the estimated number of resynchronisations resulting from user action, when selecting a profile to apply to the data connection (19)."

Claim 1 of the **first auxiliary request** comprises all the features of claim 1 of the main request, and adds the following at the end:

"wherein determining or estimating the number of forced resynchronisations comprises determining the total number of resynchronisations for all reasons, estimating the total number of those resynchronisations caused by a user and subtracting this estimated number of user caused resynchronisations to obtain an estimate for the number of forced resynchronisations; wherein the step of estimating the number of user caused resynchronisations comprises detecting that more than a predetermined minimum period of time has elapsed prior to or after a resynchronisation without a connection having been established and without the connection automatically attempting, but failing, to re-establish itself."

The other independent claim 8 of the **first auxiliary request** reads as follows:

"A management device (100) for use in an access network including a plurality of data connections (19) between end user devices (14) and an aggregation transceiver device (20) where the connections (19) are aggregated for onward connection through the access network, the access network storing in association with each data connection a profile which specifies a set of values for a plurality of parameters associated with the respective data connection, the device comprising:
a receiver for receiving monitoring data specifying the stability of each respective data connection (19) over a given period of time;
a processor unit for selecting a profile to be applied to the connection (19) in dependence on the

monitoring data;

a requester for requesting an OSS system of the access network to apply the selected profile to the data connection;

characterised by the processor unit being further operable to determine or estimate the number of times that the connection resynchronises, within a given period of time, as a result of an automatic or forced resynchronisation rather than as a result of user action and using the determined or estimated number of forced resynchronisations, discounting the estimated number of resynchronisations resulting from user action, when selecting a profile to apply to the data connection; wherein

determining or estimating the number of forced resynchronisations comprises determining the total number of resynchronisations for all reasons, estimating the total number of those resynchronisations caused by a user and subtracting this estimated number of user caused resynchronisations to obtain an estimate for the number of forced resynchronisations; and wherein

the step of estimating the number of user caused resynchronisations comprises detecting that more than a predetermined minimum period of time has elapsed prior to or after a resynchronisation without a connection having been established and without the connection automatically attempting, but failing, to re-establish itself."

Reasons for the Decision

1. CLAIMS AS GRANTED (MAIN REQUEST)

Claim 1 as granted comprises the following limiting

features (as labelled by the board):

A method of operating an access network including a plurality of data connections between end-user devices and an aggregation transceiver device where the connections are aggregated for onward connection through the access network, the method comprising the steps of:

- A) storing a plurality of different profiles, each of which specifies a set of values for a plurality of parameters associated with each data connection, and for each data connection,
- B) monitoring the performance of the connection including
 - B1) determining/estimating the number of times that the connection resynchronises, within a given period of time, as a result of a forced resynchronisation rather than as a result of user action;
 - B2) using the determined/estimated number of forced resynchronisations, discounting the estimated number of resynchronisations resulting from user action, when selecting a profile to apply to the data connection;
- C) selecting one of said stored profiles to be applied to the connection in dependence on the results of monitoring the connection;
- D) applying the selected profile to the data connection.

1.1 *Novelty and inventive step (Articles 54 and 56 EPC)*

The board agrees with the decision under appeal that the subject-matter of claim 1 as granted is novel but not inventive over **A1**.

- 1.1.1 Document A1 discloses that the *reported*, i.e. explicitly monitored, number $LPR_{m,t}$ of power losses at a user's modem (i.e. corresponding to the "number of resynchronisations resulting from user action" within the meaning of features B1) and B2) of claim 1) is to be subtracted from the number $NR_{m,t}$ of resynchronisations ("retrains") caused by noise and code violations, i.e. from automatic/forced resynchronisations, in order to measure the number of connection resynchronisations within a given period of time (see in particular page 21, line 21 to page 22, line 4). However, A1 fails to directly and unambiguously disclose that an *estimated* number of user-caused resynchronisations is to be discounted, as mandated by feature B2) of claim 1 as granted.
- 1.1.2 It was common ground during the oral proceedings before the board that the single difference between the subject-matter of claim 1 and the disclosure of A1 is that the number of resynchronisations resulting from user action is *estimated* (rather than determined) and that consequently the subject-matter of granted claim 1 is novel over A1 (Article 54 EPC).
- 1.1.3 For the assessment of inventive step, the board considers A1 to be a suitable starting point and sees the objective technical problem to be solved by present claim 1 - based on distinguishing feature B2) - as "how to derive a reliable number of automatic or forced resynchronisations in the system of A1 when *reported* modem data of a user is no longer available".

A formulation of the objective problem such as "how to apply a correct or optimal profile for a data connection to optimise performance without causing repeated losses of connection", as invoked by the

appellant, cannot however be accepted. The board holds that establishing and applying a "correct or optimal profile" in fact depends on the considerations or preferences of the network administrator. In this regard, user-caused resynchronisations could, for example, indeed be motivated by deteriorating connections or connection losses and, depending on the corresponding network administrator policies, could therefore also be taken into account when trying to find a "correct" or "optimal" profile.

- 1.1.4 As regards the obviousness of the subject-matter claimed, it is apparent to the board that A1 states that *reported* and *estimated* data complement each other, and that reported data may not be available, while estimated data is guaranteed to be available and has also various advantages over reported data (see A1, page 26, line 28 to page 27, line 18). Thus, the skilled person in the field of telecommunication networks, starting from the teaching of A1 and confronted with the above-identified objective problem, would readily pick up this hint and try to find ways of *estimating* non-reported data, such as the number of user-induced modem power offs, which - for whatever reasons (e.g. modems incapable of monitoring and reporting certain data) - is not available.

In this regard, the board is not persuaded by the appellant's argument submitted at the oral proceedings before the board that the skilled person would solve the above objective problem simply by ensuring that the modems of the users of an operator's network are replaced with next-generation modems capable of monitoring and reporting the desired data. Rather, the board finds that the skilled person would in fact be dissuaded from applying such an administrative solution

to the system of A1 since he/she would certainly be aware of the resulting cost-inefficiency compared to merely estimating the desired data by means of any available connection information.

1.1.5 In view of the above, the board concludes that the subject-matter of claim 1 as granted does not involve an inventive step having regard to A1 and the skilled person's common general knowledge.

1.2 In conclusion, the main request is not allowable under Article 56 EPC.

2. FIRST AUXILIARY REQUEST

2.1 Independent **claims 1 and 8** of this auxiliary request differ from the granted independent claims in that they also comprise the features of dependent claims 2 and 3 as granted, specifying that the monitoring step further includes that

B3) determining/estimating the number of forced resynchronisations comprises determining the total number of resynchronisations for all reasons, estimating the total number of those resynchronisations caused by a user and subtracting this estimated number of user-caused resynchronisations to obtain an estimate for the number of forced resynchronisations;

B4) the step of estimating the number of user-caused resynchronisations comprises detecting that more than a predetermined minimum period of time has elapsed prior to or after a resynchronisation without a connection having been established and without the

connection automatically attempting, but failing, to re-establish itself.

2.2 *Admission into the appeal proceedings*

2.2.1 The claims of the first auxiliary request are identical to the claims of "Auxiliary Request 4.i" as filed (alongside the other seventeen auxiliary requests) with the statement setting out the grounds of appeal (cf. point III above). In appeal proceedings, the admissibility of claim requests filed with the statement setting out the grounds of appeal is governed by Article 12(4) RPBA, which confers on a board the discretionary power "to hold inadmissible facts, evidence or requests which could have been presented or were not admitted in the first instance proceedings".

2.2.2 According to the factual situation of this case, independent **claim 8** of the present first auxiliary request (directed to a "management device" corresponding to method claim 1) differs from independent claim 8 of the former second auxiliary request, which the opposition division did not admit into the opposition proceedings, essentially in that it no longer includes, after the clause "the processor unit being further operable to determine or estimate ...", the additional phrase "wherein the processor unit is operable to determine or estimate ...". The former second auxiliary request underlying the appealed decision was not admitted into the proceedings on the ground that it was not *prima facie* clear due to the ambiguity introduced by the above additional phrase (cf. appealed decision, reasons 14).

Following the amendments made to claim 8 of the present

first auxiliary request, in particular the removal of the additional phrase, the board is satisfied that the objections raised under Article 84 EPC are overcome and that the subject-matter of claim 8 as amended is now clearly defined.

2.2.3 Furthermore, it appears from the file that the sole difference between the claims of the present first auxiliary request and those of the third auxiliary request filed on 3 January 2014 in the first-instance proceedings prior to the oral proceedings before the opposition division is that present independent claims 1 and 8 comprise the final phrase "without the connection automatically attempting, but failing, to re-establish itself" instead of "without the line automatically attempting, but failing, to re-establish the connection" (emphasis added by the board), as recited in those former claims as well as in the claims as originally filed. Hence, the subject-matter of the present first auxiliary request apparently corresponds to that of the former third auxiliary request, which had been filed for the first time in the first-instance proceedings and was subsequently replaced with the non-admitted second auxiliary request underlying the appealed decision.

2.2.4 In view of the above observations, at the oral proceedings before the board there was a discussion in particular of whether the above procedural circumstances and conduct amounted to a reinstatement of subject-matter previously withdrawn, with the (possibly abusive) aim of preventing it from being decided on its merits (i.e. as regards novelty and inventive step) in the opposition proceedings, so that this board would have to decide on its allowability for the very first time in these second-instance

proceedings.

2.2.5 The appellant argued that the additional phrase objected to had been incorporated erroneously and unintentionally into former claim 8 due to editorial errors in the version for electronic filing, caused by time pressure at a late stage of the oral proceedings before the opposition division (which lasted until 18.45 hrs), and that it was in no way the appellant's intention to thereby foreclose a decision on novelty and inventive step.

2.2.6 In the light of the above and in the absence of counter-arguments from any other party at the oral proceedings, the board decided to admit the claims of the first auxiliary request into the appeal proceedings in the exercise of its discretionary power under Article 12(4) RPBA, based on the following facts and observations:

- the amendments made to present independent claims 1 and 8 arise merely from the granted claims, and further limit the underlying subject-matter in a convergent way to distinguish it further from the cited prior art (cf. point 2.1 above);
- the amendments made to present independent claim 8 may objectively be considered to be a serious and adequate attempt to overcome the *prima facie* clarity objection raised by the opposition division (cf. point 2.2.2 above);
- withdrawing a claim request in first-instance proceedings and then reintroducing an almost identical claim request in the appeal proceedings cannot be seen as clearly abusive procedural conduct on the part of the appellant, when taking account of the special circumstances of the present

case (cf. point 2.2.5 above).

3. *Remittal of the case for further prosecution*

3.1 The amendments made to independent claim 8 of the first auxiliary request rendered obsolete the main ground (under Article 84 EPC) for not admitting it into the opposition proceedings (cf. point 2.2.2 above).

3.2 However, the compliance of the subject-matter of claims 1 to 3 as granted with the requirements of Article 52 EPC, in particular novelty and inventive step, was neither discussed nor decided in the appealed decision (although the former respondent provided arguments in support of its lack of inventive step; see notice of opposition, sections 4.2 and 4.3). The board therefore holds that under the present circumstances it is not appropriate to pass final judgment on the novelty and inventive step of the claims of the first auxiliary request for the very first time in these appeal proceedings.

3.3 For these reasons, and with the appellant's consent, the board decides to exercise its discretion under Article 111(1) EPC to remit the case to the opposition division for further prosecution, on the basis of the claims of the present first auxiliary request.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance for further prosecution on the basis of claims 1 to 10 filed as first auxiliary request with letter dated 5 August 2016.

The Registrar:

The Chair:



P. Martorana

A. Ritzka

Decision electronically authenticated