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Datasheet for the decision of 11 April 2013

Case Number: T 0238/10 - 3.5.05

Application Number: 02721957.5

Publication Number: 1432173

IPC: H04L 29/06

Language of the proceedings: EN

Title of invention:
A calling method for endpoints across zones in IP network system

Applicant:
Huawei Technologies Co., Ltd.

Headword:
Calling numbers allocation in IP network/HUAWEI

Relevant legal provisions:
EPC Art. 54, 56
RPBA Art. 13(1)

Keyword:
"Admission of late-filed amendments to appellant's case (yes)"
"Remittal to the first instance for further prosecution"

Catchword:
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Case Number: T 0238/10 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 11 April 2013

Appellant: (Applicant)
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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 14 September 2009 refusing European patent application No. 02721957.5 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair: A. Ritzka
Members: P. Cretaine
D. Prietzel-Funk

Summary of Facts and Submissions

I. The appeal is against the decision of the examining division, posted on 14 September 2009, refusing European patent application No. 02721957.5 on the ground that the claims according to a main and an auxiliary request lacked novelty (Article 54 EPC) having regard to the disclosure of

D1: WO 01/58091.

II. Notice of appeal was received on 13 November 2009 and the appeal fee was paid on the same day. The statement setting out the grounds of appeal was received on 8 January 2010. The appellant requested that the decision of the examining division be set aside in its entirety and that a patent be granted on the basis of a new request (claims 1 and 2) filed with the statement setting out the grounds of appeal. In addition, oral proceedings were requested as an auxiliary measure.

III. A summons to oral proceedings scheduled for 11 April 2013 was issued on 23 November 2012. In an annex to this summons, the board expressed its preliminary opinion on the appeal pursuant to Article 15(1) RPBA. An objection was raised under Article 84 EPC against claim 1 of the request. The appellant was also informed that, notwithstanding the clarity objection, the subject-matter of claims 1 and 2 did not appear to involve an inventive step (Article 56 EPC), having regard to the disclosure of D1 and the common general knowledge of the H.323 standard as disclosed in:

D2: ITU-T, H.323, "Packet Based Multimedia Communications Systems", September 1999, pages 1 to 129.

IV. With a letter of reply dated 11 March 2013, the appellant submitted a new set of claims 1 and 2, replacing the set then on file.

V. During the oral proceedings, held as scheduled on 11 April 2013, the appellant submitted a new set of claims 1 and 2 as its main request. Its final request was that the decision under appeal be set aside and that a patent be granted on the basis of the claims of the main request, submitted during the oral proceedings. At the end of the oral proceedings, the decision of the board was announced.

VI. Claim 1 of the main request reads as follows:

"A calling method for endpoint across zones in an IP network system, wherein each endpoint in every zone is named and registered with a unique E. 164 number in its domestic zone by the gatekeeper, GK, of its domestic zone, and wherein each zone in the IP network system has a unique zone number,
characterized by comprising:
A. combining the unique E.164 number of each endpoint in its domestic zone with the unique zone number of the domestic zone to form a unique endpoint alias, said unique endpoint alias being unique in said IP network system,
B. a calling endpoint directly calling a called endpoint by using the unique endpoint alias of the called endpoint."

Reasons for the Decision

1. Admissibility of the appeal

The appeal complies with the provisions of Articles 106 to 108 EPC (cf. point II above) and is therefore admissible.

2. Admission of the new (and final) main request

The final main request was based on the claims filed in response to the objections raised in the board's communication under Article 15(1) RPBA. The claims were further amended during the oral proceedings in response to objections in respect of clarity and support raised by the board. The board, exercising its discretion, has decided to admit this request into the proceedings under Article 13(1) RPBA.

Claims 1 and 2 of the request differ from claims 1 and 2 of the main request underlying the appealed decision mainly in that claim 1 has been amended to define that each endpoint is registered with a unique E.164 number within its zone, instead of any unique number, and that a unique alias of the endpoint, instead of an E.164 alias, is formed by combining the E.164 number with a unique zone number in the IP network. These amendments are supported by the application documents as originally filed (see in particular paragraphs [0016] and [0019] of the published European patent application). Hence, the above amendments comply with Article 123(2) EPC.

3. Novelty and inventive step

3.1 Prior art

D1 discloses a communication system for routing calls across zones of a private network using Voice Over Internet Protocol technology (ITU-H.323 standard). H.323 gatekeepers are in charge of geographical zones within which the endpoints are located (see page 3, second paragraph; Figure 3a). Each endpoint is registered to the gatekeeper (GK) of its zone and is allocated an E.164 number within a certain range of E.164 numbers allocated exclusively to the zone (see page 27, second paragraph; page 30, second paragraph; Figure 9a). Pages 41 to 45 in combination with Figure 6 describe the called number-based call routing procedure between a calling endpoint H.323 EP-A_3 and a called endpoint H.323 GK-B_2 as follows:

- the gatekeeper H.323 GK-A of said calling endpoint receives an admission request ARQ signalling message from the calling endpoint (step ST61) containing the E.164 number of the called endpoint;
- the gatekeeper of the calling endpoint compares the E.164 number of the called endpoint with entries in a configuration table defining the ranges of E.164 allocated to the gatekeepers in the network;
- if the E.164 number of the calling endpoint belongs to one of these ranges, the gatekeeper of the calling endpoint determines the network address of the gatekeeper H.323 GK-B serving the called endpoint;
- the gatekeeper of the calling endpoint sends a location request LRQ signalling message to the gatekeeper of the called endpoint to ask for the IP

network address of the called endpoint identified by the E.164 number (step ST62);
- the gatekeeper of the called endpoint sends a location confirmation LCF signalling message to the gatekeeper of the calling endpoint, containing the IP address of the called endpoint (step ST63);
- the gatekeeper of the calling endpoint sends an admission confirm ACF message to the calling endpoint containing the IP address of the called endpoint (step ST64);
- the calling endpoint sends a call signalling message setup to the called endpoint through the gatekeepers (steps ST65, ST66, ST67);
- the call is initiated.

D2 is ITU Recommendation H.323. In particular, paragraph 7.2.2 relates to the procedure for registering an endpoint to the gatekeeper of the zone it is joining by allocating it an E.164 number, unique in the zone. Paragraph 7.3.1 relates to the call signalling between endpoints.

It was common ground between the appellant and the board that D1 represents the closest prior art.

3.2 Hence, the difference between the subject-matter of claim 1 and the disclosure of D1 is seen to reside in the feature of using, for the calling method across zones, an endpoint alias formed by combining a unique E.164 number of each endpoint in its domestic zone with a unique zone number of the domestic zone, instead of using an E.164 number as endpoint alias as disclosed in D1. Consequently, the subject-matter of claim 1 is found to be novel over D1 (Article 54 EPC).

The technical effect of this distinguishing feature is that the endpoint is provided with an endpoint alias longer than the maximum of 15 digits stipulated by the E.164 ITU-T recommendation.

The objective technical problem can thus be formulated as how to increase the flexibility of the endpoint numbering scheme ensuring unique addresses in an IP network having multiple geographical zones.

The E.164 recommendation is the standard that defines the international public telecommunication numbering plan and the format of telephone numbers used in the Plain Switch Telephone Network PSTN and some other data networks. This recommendation stipulates that E.164 numbers can have a maximum of 15 digits and are usually written with an appropriate international call prefix (e.g. 00). The appellant convincingly argued that the E.164 recommendation was, at the priority date of the present application in year 2001, the key and well-established standard which marked the skilled persons who shaped the telecommunication numbering plans. Accordingly, a skilled person would not have had any objective reason to deviate from the framework of the E.164 recommendation when designing a numbering plan for Voice Over IP, as is the case in claim 1. Moreover, in the board's view, none of the available prior-art documents D1 and D2 give any hint to the skilled person about leaving the framework of the E.164 recommendation. Rather, the closest prior art D1 proposes a solution to the numbering of endpoints which fully complies with the E.164 recommendation and which consists in allocating ranges of E.164 numbers to network zones. The appellant further plausibly argued

that, by using the full range of E.164 complying numbers within a single zone combined with the unique zone number of the single zone, as defined in claim 1, flexibility and deployment of the Voice Over IP scheme are greatly improved.

For these reasons the board judges that the subject-matter of claim 1 involves an inventive step (Article 56 EPC), having regard to the prior-art documents on file.

4. Procedural matters

The originally filed claims, the claims as amended during examination, the claims on which the impugned decision was based, and the claims filed with the statement setting out the grounds of appeal had all to be interpreted as meaning that the unique zone prefix and the unique number of an endpoint in the zone were adapted in such a way that the formed endpoint alias remained within the E.164 standard. The decision under appeal was based solely on the ground of lack of novelty of the claims, having regard to the disclosure of D1.

By filing the amended claims according to the request on file, the appellant has substantially changed the subject-matter of the claims by introducing the new feature that the unique number in the zone is an E.164-compliant number, and not the endpoint alias any more.

As its findings with respect to the novelty and inventive step of the subject-matter of claim 1 (see

paragraph 3 above) are essentially based on this new feature having regard to the disclosure of D1 and D2, the board considers it appropriate to remit the case to the examining division for further prosecution on the basis of the claims as amended during the oral proceedings before the board.

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.

The Registrar: The Chair:

K. Götz A. Ritzka