

**Internal distribution code:**

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

**Datasheet for the decision  
of 30 January 2026**

**Case Number:** T 1327/24 - 3.5.05

**Application Number:** 20171074.6

**Publication Number:** 3706374

**IPC:** H04L12/46

**Language of the proceedings:** EN

**Title of invention:**

Point-to-multipoint functionality in a bridged network

**Patent Proprietor:**

Mala Technologies Ltd.

**Opponents:**

Cisco Systems, Inc.  
Huawei Technologies Deutschland GmbH

**Headword:**

Discarding spoke-type frames/MALA TECHNOLOGIES

**Relevant legal provisions:**

EPC Art. 76(1), 100(c)  
RPBA 2020 Art. 13(2)

**Keywords:**

Admittance of claim requests filed after Art. 15(1) RPBA  
communication - auxiliary requests X0a and X0b (no): no cogent  
reasons justifying "exceptional circumstances"  
Added subject-matter - main request and remaining auxiliary  
requests (yes)

**Decisions cited:**

G 0001/06



**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

**Case Number: T 1327/24 - 3.5.05**

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.05**  
**of 30 January 2026**

**Appellant:**

(Patent Proprietor)

Mala Technologies Ltd.  
c/o Tamir  
41 Yosef Zvi  
5231249 Ramat Gan (IL)

**Representative:**

Kurig, Thomas  
Becker Kurig & Partner  
Patentanwälte mbB  
Bavariastraße 7  
80336 München (DE)

**Respondent I:**

(Opponent 1)

Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134 (US)

**Representative:**

Bardehle Pagenberg Partnerschaft mbB  
Patentanwälte Rechtsanwälte  
Prinzregentenplatz 7  
81675 München (DE)

**Respondent II:**

(Opponent 2)

Huawei Technologies Deutschland GmbH  
Hansaallee 205  
40549 Düsseldorf (DE)

**Representative:**

Ho, Dominik  
df-mp Patentanwälte Rechtsanwälte PartG mbB  
Theatinerstraße 16  
80333 München (DE)

**Decision under appeal:**

**Decision of the Opposition Division of the  
European Patent Office posted on 17 September  
2024 revoking European patent No. 3706374  
pursuant to Article 101(3)(b) EPC.**

**Composition of the Board:**

<b>Chair</b>	K. Bengi-Akyürek
<b>Members:</b>	J. Eraso Helguera
	F. Bostedt

## Summary of Facts and Submissions

- I. This case concerns the appeal filed by the proprietor against the decision of the opposition division revoking the opposed patent under Article 101(2) and 101(3)(b) EPC for added subject-matter (Articles 100(c) and 76(1) EPC).
- II. Oral proceedings before the board were held on 30 January 2026. The final requests of the parties were:

The proprietor (appellant) requested, as its **main request**, that the decision under appeal be set aside and that the oppositions be rejected, or, in the alternative, that the patent be maintained in amended form on the basis of one of **fifty auxiliary requests**:

- **auxiliary requests X0a and X0b**, filed after the board's communication on 1 December 2025,
- **auxiliary requests X1 and Y1**, filed during oral proceedings before the opposition division,
- **auxiliary request 1**, filed with the appellant's submission dated 13 October 2023 in reply to the opponent 1's notice of opposition,
- **auxiliary requests 6 to 9, 11 to 19, 22 to 26, 20, 21, 1a, 16a, 17a, 21a, 25a and 26a**, filed with the appellant's submission dated 3 July 2024 in reply to the opposition division's preliminary opinion annexed to the summons to oral proceedings and to opponent 2's notice of intervention,

- **auxiliary request 17'**, **main request b**, **auxiliary requests X1b, 1b, 11b, 12b, 13b, 14b, 15b, 17b, 17'b, 18b, 19b, 22b, 23b, 24b, 25b, 26b and 20b**, filed for the first time with the statement of grounds of appeal.

The appellant further requested reimbursement of the appeal fee under Rule 103(1)(a) EPC.

The opponents (respondents) requested that the appeal be dismissed.

At the end of those oral proceedings, the board announced its decision.

III. Claim 1 as granted (i.e. claim 1 of the **main request**) reads as follows:

"A method for use by an Ethernet switch device (28) that comprises a first interface (34) that comprises a physical Ethernet port and a second interface (36) that comprises a physical Ethernet port, the method comprising:

receiving (70) frames from the first interface (34);  
transmitting frames to the first interface (34);  
receiving (70) frames from the second interface (36); and  
transmitting frames to the second interface,  
the method being further for use with frames marked as first type frames defined by a first indication placed in an header field, and frames marked as second type frames defined by a second indication placed in the header field, the method being **characterized in that** it comprises

forwarding (78, 98), to the second interface, frames that are received from the first interface and having a destination address that is directed to the second interface and are marked (72) as first type frames;  
discarding (80) frames that are marked as first type frames and that are received from the second interface; and  
forwarding (78, 98), to the first interface, frames that are marked as second type frames and are received from the second interface and having a destination address that is directed to the first interface."

IV. In claim 1 of **auxiliary requests X0a, X1, Y1, 1, 6 to 9, 11 to 13, 18, 19, 22, 20, 21, 1a, 21a, main request b, auxiliary requests 1b, 11b, 12b, 13b, 18b, 19b, 20b, 22b and X1b**, the step "*discarding (80) frames that are marked as first type frames and that are received from the second interface;*" remains unamended as the only "discarding" step.

V. Claim 1 of **auxiliary request X0b** comprises *inter alia* the following addition to the "discarding" step:

"discarding (80) frames that are marked as first type frames and that are received from the second interface, wherein the discarded frames have a destination address that is directed to the first interface;".

VI. Claim 1 of **auxiliary requests 14 to 17, 17', 23 to 26, 16a, 17a, 25a, 26a, 14b, 15b, 17b, 17'b and 23b to 26b** comprises *inter alia* the following additions relating to the "discarding" step:

"discarding (80) frames that are received from the first interface and having a destination address that is directed to the third interface and are marked as first type frames;

discarding (80) frames that are received from the third interface and having a destination address that is directed to the first interface and are marked as first type frames;".

## **Reasons for the Decision**

### 1. THE OPPOSED PATENT

According to paragraphs [0011] to [0013] belonging to the section "SUMMARY OF THE INVENTION" of the opposed patent, the present invention relates to methods and systems for affording point-to-multipoint (P2MP) connectivity over a "Layer-2 bridged network", while maintaining the underlying Layer-2 network architecture. The interfaces of the switches located at the edge of a Layer-2 bridged network are configured as belonging to first and second types. In access network scenarios, for example, the first interface type may be a **hub-type interface**, which connects to the Internet and public-network services (or to a content centre, such as a video distribution or video-on-demand service), while the second interface type is a **spoke-type interface**, which connects to customer premises equipment.

Switches within the Layer-2 bridged network may also be connected to one another by a third type of interface, referred to as a **network-type interface**. Upon receiving frames through interfaces of the first and second types, the switches label the received data frames with

corresponding first and second *type indications*. These type indications are then used in MAC learning and forwarding processes so as to prevent frames received through interfaces of the second type (such as spoke-type interfaces) from being transmitted through other interfaces of the second type. These frames may thus be transmitted out of the Layer-2 bridged network only through first-type (hub) interfaces. On the other hand, frames received through interfaces of the first type may be transmitted through any of the other interfaces.

2. EARLIER APPLICATION(S)

2.1 The opposed patent is based on a second-generation divisional application. Thus, to comply with the requirement of Article 76(1), second sentence, EPC, anything disclosed therein must be directly and unambiguously disclosed in each of the preceding applications as filed (see **G 1/06**, Headnote).

2.2 The appellant has referred to the description and the drawings of the PCT publication of the "earliest" application **E1** (= WO 2008/023360 A2) as filed, indicating that those "*were filed identical for all generations of the family of the patent*".

3. MAIN REQUEST

**Claim 1 as granted** comprises the following limiting features (outline based on the one used in the decision under appeal):

1.0 A method for use by an Ethernet switch device that comprises a first interface that comprises a physical Ethernet port and a second interface that

comprises a physical Ethernet port, the method comprising:

- 1.1 receiving frames from the first interface;
- 1.2 transmitting frames to the first interface;
- 1.3 receiving frames from the second interface;
- 1.4 transmitting frames to the second interface,
- 1.5 the method being further for use with frames marked as first-type frames defined by a first indication placed in an header field, and frames marked as second-type frames defined by a second indication placed in the header field,
- 1.6 forwarding, to the second interface, frames that are received from the first interface and having a destination address that is directed to the second interface and are marked as first-type frames;
- 1.7 discarding frames that are marked as first-type frames and that are received from the second interface;
- 1.8 forwarding, to the first interface, frames that are marked as second-type frames and are received from the second interface and having a destination address that is directed to the first interface.

3.1 *Claim 1 - added subject-matter (Articles 100(c) and 76(1) EPC)*

3.1.1 The board agrees with the opposition division and the respondents that, irrespective of whether "discarding" is to be understood as referring to an "absolute" or a

"relative" discarding step (see e.g. appealed decision, Reasons 2 and 2.2), **feature 1.7** contains added subject-matter.

This is because feature 1.7 merely establishes two requirements for a data frame to be discarded, namely (i) that it has to be marked as "first-type" and (ii) that it must have been received from the "second interface". However, such a teaching is not directly and unambiguously derivable from E1. In other words, nowhere in E1 is it disclosed, at this level of detail, that the claimed "discarding" step only considers the *type* and the *source* of the received data frames. Instead, for example, claim 8 of E1 indicates that a frame is to be discarded if the frame comprises the "second type indication" and the type designation indicates that the "destination address" is associated with the second type of the interfaces (see also E1, page 5, lines 9 to 12).

3.1.2 The appellant provided the following bases for feature 1.7 in E1:

(a) The appellant referred to page 4, lines 11 to 15 (the recitation of claim 1 in the same document) arguing that "*prevented [frames labelled with the second type indication] from being transmitted through the interfaces of the second type*" already disclosed requirements (i) and (ii) of feature 1.7. The "*frames labelled with the second type indication*" corresponded to the "frames that are marked as first type" in feature 1.7, i.e. spoke-type frames, whereas "the interfaces of the second type" corresponded to the "first interface" in granted claim 1, i.e. a "spoke-type interface".

- (b) Furthermore, page 5 of E1 showed that the "destination address" was not relevant for the invention, since other discarding steps were possible, such as those based on the "source address" (see page 5, lines 26 to 27).
- (c) In accordance with the teachings of E1, certain switches depicted in Figure 1 ("bridge nodes 28") would discard data frames received from the network interface 36 and being marked as spoke-type, without any need to further consult the "destination address".
- (d) In any event, the references in E1 made apparent that the technical context of claim 1 was an IEEE 802.1D network. Thus, the skilled reader would have understood that those switches never "bounce back" data frames and that the "destination address" is always somehow considered.

3.1.3 These arguments fail to convince the board for the following reasons:

- (a) The board agrees with the respondents that "prevented", as it appears at page 4 and claim 1 of E1, is merely listed as a result ("*such that the frames*") to be achieved by the "forwarding" operation. It discloses neither a "discarding operation" nor its specific requirements. At any rate, the phrase "*through the interfaces of the second type*" would relate to the "egress interface", which is typically obtained through inspection of the "destination address". In contrast to this, requirement (ii) of feature 1.7 relates to the "ingress interface".

- (b) In the board's view, the embodiments of page 5 confirm that the "discarding" operation involves requirements which are not present in feature 1.7. As indicated by the respondents, this is also in line with claim 8 of E1, which reads "*discarding the frame if the frame comprises the second type indication and the type designation indicates that the destination address is associated with the second type of the interfaces*".
- (c) The board concurs with the respondents that the appellant's argumentation using Figure 1 would illustrate, at most, that a specific type of switch comprising only "spoke-type interfaces" and a single "network-type interface" *could* discard frames marked as spoke-type received from the only "network-type interface" without any further considerations as per feature 1.7. However, granted claim 1 does not contain any limitations concerning the particular types of interfaces or their number. It is only in granted claim 2 that the "*first type is a CPE interface*" and "*the second interface is a network interface*". Arguing *a posteriori* that a given feature is technically meaningful or achieves the sought-after result does not necessarily prove that it was indeed directly and unambiguously derivable from E1, much less so in the broader context of granted claim 1.
- (d) The appellant's reference to the "*learning and forwarding - including discarding - mechanisms*" of IEEE 802.1D does not convince the board, either. As argued by the respondents, in E1, the "destination address" is used to obtain the "type of the egress interface" so that the forwarding - including discarding - decision is indeed "*responsive to the*

*type indications*" (i.e. through which type of interfaces the frame enters or leaves the L2 network). These considerations, however, go beyond the "bouncing-back prevention" mechanisms that could be inherent to the IEEE 802.1D standard.

3.2 Thus, the ground for opposition under Article 100(c) in conjunction with Article 76(1) EPC prejudices the maintenance of the granted patent.

4. AUXILIARY REQUESTS X0a AND X0b

4.1 *Admittance into the appeal proceedings (Article 13(2) RPBA)*

4.1.1 The claims of **auxiliary requests X0a and X0b** were filed *after* notification of the board's communication under Article 15(1) RPBA and thus at a very late stage of the proceedings. Thus, they constitute an "amendment" to the appellant's appeal case within the meaning of Article 13(2) RPBA. According to this provision, any amendment to a party's appeal case is, in principle, not taken into account, unless there are "exceptional circumstances" which have been justified with cogent reasons by the party concerned.

4.1.2 Thus, the next question to be answered is whether the proprietor provided cogent reasons justifying "exceptional circumstances" for the late-filing of the present auxiliary request.

4.1.3 The appellant submitted that the amendments constituted a direct response to the board's preliminary opinion. They *prima facie* overcame all the issues addressed by the board. Furthermore, they did not complicate the examination of the appeal case and they contributed to

procedural economy and legal certainty.

4.1.4 However, the board agrees with the respondents that the objections relating to **feature 1.7** had been raised already in opponent 1's notice of opposition. The board's preliminary opinion (see e.g. point 4.3.2) explicitly referred to the reasoning provided in the decision under appeal and merely confirmed its endorsement. Besides, the alleged "lack of complexity" and the "*prima facie* allowability of the amendment" - in respect of those issues discussed with the board up to the stage of the oral proceedings at which the filing was made - are not sufficient to establish the presence of "exceptional circumstances" which would justify the admittance of the new claim request. Rather, the respondents reacted to the filing of those auxiliary requests with a number of objections under Articles 76(1), 123(3) and 84 EPC which should, *inter alia*, be discussed in detail if the auxiliary requests were to be admitted into the appeal proceedings.

4.2 Hence, the board did not admit auxiliary requests X0a and X0b into the appeal proceedings (Article 13(2) RPBA).

## 5. REMAINING AUXILIARY REQUESTS

### 5.1 *Claim 1 - added subject-matter (Article 76(1) EPC)*

5.1.1 The board agrees with the opposition division and with the respondents that the amendments carried out in the remaining auxiliary requests either do not relate to "discarding" at all (i.e. **auxiliary requests X1, Y1, 1, 6 to 9, 11 to 13, 18, 19, 22, 20, 21, 1a, 21a, main request b, auxiliary requests 1b, 11b, 12b, 13b, 18b, 19b, 20b, 22b and X1b**) or they concern "discarding"

frames received "from the *first* interface" or "from the *third* interface" rather than "from the *second* interface" (i.e. **auxiliary requests 14 to 17, 17', 23 to 26, 16a, 17a, 25a, 26a, 14b, 15b, 17b, 17'b, 23b, 24b, 25b and 26b**).

5.1.2 Hence, they cannot mend the outstanding deficiency, and the same reasoning as set out in point 3.1 above applies *mutatis mutandis*.

5.2 Thus, irrespective of admittance considerations, none of those auxiliary requests is allowable under Article 76(1) EPC.

## 6. REQUEST FOR REIMBURSEMENT

6.1 Pursuant to Rule 103(1)(a) EPC, the appeal fee shall be reimbursed in full, if a Board deems an appeal to be allowable and if such reimbursement is equitable by reason of a substantial procedural violation.

6.2 Since the proprietor's appeal is not allowable (see points 3 to 5 above), the request for reimbursement of the appeal fee is to be refused for that reason alone.

7. As there is no allowable claim request on file, the appeal has to be dismissed.

## Order

### For these reasons it is decided that:

1. The request for reimbursement of the appeal fee is refused.
2. The appeal is dismissed.

The Registrar:

The Chair:



B. Brückner

K. Bengi-Akyürek

Decision electronically authenticated