

The examination is being carried out on the **following application documents**

Description, Pages

3-70	filed in electronic form on	27-06-2019
1, 2, 2a, 71	filed in electronic form on	05-05-2020

Claims, Numbers

1-23	filed in electronic form on	10-05-2022
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Drawings, Sheets

1/10-10/10	filed in electronic form on	27-06-2019
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1 The following document D1 is referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1 EP 2 595 344 A2 (HUAWEI TECH CO LTD [CN]) 22 May 2013 (2013-05-22)

2 While the Applicant's observations submitted with the amended claims (letter of 10-05-2022) have been carefully considered, the Examining Division nevertheless maintains the opinion, that the subject-matter of **the independent claims 1, 8, 12, 19 and 23** is still so unclear (Article 84 EPC), that a meaningful and efficient assessment of inventive step appears only be possible after these claims are rendered clear by the Applicant through further amendments.

The arguments brought forward by the Applicant with respect to clarity are not convincing.

It is pointed out, that according to the Guidelines F-IV, 4.1 the meaning of the terms of a claim must, as far as possible, be clear for the person skilled in the art from the wording of the claim alone (see also F-IV, 4.2). It is opinion of the Examining Division, that the following issues are not at all clear from the wording of the claims as currently on file:

3 The application does not meet the requirements of Article 84 EPC, because **claims 1, 8, 12 and 19** are still not clear.

3.1 In **independent claims 1 and 12** it is not clear whether it is the "device", which is sending the "first fault tracing detection request packet" or a different entity (Article 84 EPC).

3.2 The expressions "fault tracing detection", "initiating fault detection" and "service chain fault detection" used in **independent claims 1, 8, 12 and 19** leave the reader in doubt as to the meaning of the technical features to which they refer, thereby rendering the definition of the subject-matter of said claims unclear (Article 84 EPC and Guidelines F-IV-4.1 and F-IV-4.3):

3.2.1 In particular, it is impossible for the person skilled in the art to derive, e.g. from the subject-matter of **claim 1**, which faults are exactly to be detected resp. traced and how such a fault detection is actually achieved? It is entirely unclear how fault tracing/detecting can be achieved merely by requesting/sending/obtaining just ID's of one SF node and one SFE?

3.2.2 Moreover **claim 1** defines "service chain fault detection method, wherein the service chain comprises a plurality of service function nodes", but **claim 1** only obtains/provides the ID of only one SF node, but what about the other SF nodes on the path?)

It is not clear for the person skilled in the art, that by the method steps defined in **claim 1** (even though an order of service function nodes is now defined) a fault in a planned processing order of the service function nodes shall and actually can be determined.

It appears, that in best case it can only be determined, whether "the ID of one SF node" obtained in the "fault tracing detection response packet" is included in the memory of the SFE as a forwarding entry and nothing more. Apparently, no other faults, if this can be considered as a fault at all, may be detected. Hence, it appears, that there are essential features missing to define this specific scenario.

Therefore **claims 1, 8, 12 and 19** do not meet the requirements of Article 84 EPC in that the matter for which protection is sought is not defined. The claims attempt to define the subject-matter in terms of the result to be achieved.

3.3 **Claims 8 and 19** do not meet the requirements of Article 84 EPC in that the matter for which protection is sought is not defined. The claims attempt to define the subject-matter in terms of the result to be achieved. Such a definition is only allowable under the conditions elaborated in the Guidelines F-IV, 4.10. In this

instance, however, such a formulation is not allowable because it appears possible to define the subject-matter in more concrete terms, viz. in terms of how the effect is to be achieved.

Claims 8 and 19 define "determining, by the device for initiating fault detection, that forwarding between the SFE and the SF node is normal based on the received ID of the SF node", without specifying how is actually achieved only by obtaining just one ID of an SF node?

It appears, that in best case it can only be determined, whether "the ID of one SF node" obtained in the "fault tracing detection response packet" is included in the memory of the SFE as a forwarding entry and nothing more. Apparently, no other faults, if this can be considered as a fault at all, may be detected. Hence, it appears, that there are essential features missing to define this specific scenario.

Most importantly, just knowing that the ID of a SF node is included in the memory of the SFE, does not mean by any means, that "the forwarding between the SFE and the SF node is normal". There are countless fault possibilities, such as port, link, transmission problems, etc. between the SFE and the SF node (the SF might be out of service entirely), for which the forwarding between the SFE and the SF node is not normal!

Therefore, also **claims 8 and 19** do not meet the requirements of Article 84 EPC in that the matter for which protection is sought is not defined. The claims attempt to define the subject-matter in terms of the result to be achieved.

- 4 It is not at present apparent which part of the application could serve as a basis for a new, allowable claim. Should the Applicant nevertheless regard some particular matter as patentable, an independent claim should be filed taking account of Rule 43(1) EPC. The Applicant should also indicate in the letter of reply the difference of the subject-matter of the new claim vis-à-vis the state of the art and the significance thereof, preferably using the problem-solution approach.

Moreover when filing an amended set of claims, the Applicant is requested to also take the following remarks into account:

- 4.1 New independent claims should be drafted in the two-part form in accordance with Rule 43(1) EPC.
- 4.2 When filing amended claims the Applicant should at the same time bring the description into conformity with the amended claims **in particular in compliance with the Guidelines F-IV 4.3(iii), F-IV 4.4 and C-V 1.1.0: in order**

to meet the requirement of Article 84 EPC, that the claims have to be supported by the description, all embodiments of the description should fall into the scope of the claim set. Other embodiments should either be excised or it should be stated that they do not fall into the scope of the claim set ("... does not fall under the invention"). A mere renaming of such other embodiments, such as for instance "examples" or "aspects" is not sufficient.

Care should be taken during revision, especially of the introductory portion and any statements of problem or advantage, not to add subject-matter which extends beyond the content of the application as originally filed (Article 123(2) EPC).

Further the attention of the Applicant is drawn to the fact that amended claims may not relate to unsearched subject-matter (Rule 137(4) EPC).

- 4.3 In order to facilitate the examination of the conformity of the amended application with the requirements of Article 123(2) EPC, the Applicant is requested to clearly identify the amendments carried out, irrespective of whether they concern amendments by addition, replacement or deletion, and **to indicate the passages of the application as filed on which these amendments are based.**