

Keywords: plain and ordinary meaning, obviousness, infringement

General: In determining obviousness, the plain and ordinary meaning of claim language found in the specification is not altered by use of passive voice and plural language in the claims.

Apple Inc. v. MPH Technologies OY

United States Court of Appeals for the Federal Circuit

No. 2021-1532, 2021-1533, 2021-1534

Decided: Mar. 9, 2022

I. Facts and Procedural History

The Appellant, Apple Inc. (Apple), appealed from Patent Trial and Appeal Board *inter partes* reviews of three patents owned by MPH Technologies OY (MPH), which held that Apple failed to show that claims 2, 4, 9, and 11 of U.S. Patent No. 9,712,494 ('494), claims 7–9 of U.S. Patent No. 9,712,502 ('502), and claims 3, 5, 10, and 12–16 of U.S. Patent No. 9,838,362 ('362) would have been obvious. The three patents share a written description and relate to a method for secure forwarding of a message via an intermediate computer in a telecommunication network. More particularly, the three patents are directed towards improving secure messaging between arbitrary hosts (e.g., messaging across local area networks (LAN), private and public wide area networks (WANs), or the internet utilizing Internet Protocol (IP) security protocols) which are normally designed for static connects and, thus, are not well suited for communications with mobile computers. Techniques to overcome these deficiencies commonly utilize an intermediate host that facilitates communication between a mobile computer and its communication target, however, this solution relies heavily on a concept known as “tunneling.” In tunneling, an entire data packet and its outer header is encapsulated and a new outer header is added. Unfortunately, the use of tunneling can cause extra packet size overhead or require the intermediate computer to perform decryption on the packets, which could lead to security problems.

The three patents at issue disclose a method for secure forwarding of a message from a first computer to a second computer via an intermediate computer in a telecommunication network that avoids these disadvantages. The three patents disclose a first computer “processes [a] formed message using a security protocol and encapsulates the message at least in an outer IP header,” which is sent to an intermediate computer. The intermediate computer “matches the outer IP header address fields together with a unique identifier used by the security protocol, and performs a translation of the outer addresses and the unique identity used by the security profile.” The translated packet is then sent to a second computer, which processes it using a standard

security protocol. This method does not use any “extra encapsulation overhead” typical of the commonly used solutions.

MPH asserted the claims of the three patents against Apple in the Northern District of California. In response, Apple Inc. (Apple) filed three *inter partes* reviews each claim of the three patents owned by MPH Technologies OY. (MPH). Apple primarily relied on a combination of Request for Comments 3104 (RFC3104) and U.S. Patent 7,032,242 (Grabelsky). The Patent Trial and Appeal Board found several dependent claims nonobvious. Apple appealed this ruling.

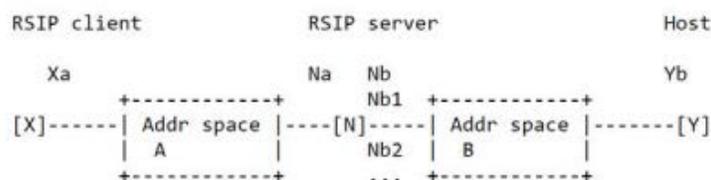
II. Issue

1. Did the Patent Trial and Appeal Board (PTAB) err in its use of applying plain and ordinary meaning to the claim language based on the specification to find the dependent claims nonobvious?

III. Discussion

1) No. The federal circuit affirmed the decision of the PTAB in holding that several dependent claims are nonobvious. The court noted that claim terms are generally given their plain and ordinary meaning, which is the meaning one of ordinary skill in the art would ascribe to a term when read in the context of the claim, specification, and prosecution history.

The court reviewed dependent claim 11 of the ‘494 patent and the dependent claim 12 of the ‘362 patent, where each claim requires that “the source address of the forwarded message is the same as the first network address. The PTAB was not persuaded that RFC3104 disclosed the limitation. RFC3104 uses the following methodology:



In this model, an RSIP server examines a packet sent by Y destined for X. “X and Y belong to different address spaces A and B, respectively, and N is an [intermediate] RSIP server.” N has two addresses: Na on address space A and Nb on address space B, which are different. According to Apple, the message sent from Y to X is received by RSIP server N on the Nb interface and then must be sent to Na before being forwarded to X. In Apple’s view, because the intermediate computer sends the message from Nb to Na before forwarding it to X, Na is both a first network address and the source address of the forwarded message. That the message was not sent directly to Na, Apple claims, is of no importance given the claim language. The PTAB disagreed and found there was no record evidence that the mobile computer sent the message directly to Na. In response, Apple argued that the PTAB misconstrued the claims to require that the mobile computer send the secure message directly to the intermediate computer. According to Apple, that construction is inconsistent with the phrase “intermediate computer configured to receive from a mobile computer a secure message sent to the first network address” in claim 1 of

the '494 patent, upon which claim 11 depends. Under this passive language, Apple claims, the mobile computer need not send the message to the first network address so long as the message is sent there eventually.

The court directly disagrees with this assertion. The court stated that the plain meaning of “intermediate computer configured to receive from a mobile computer a secure message sent to the first network address” requires the mobile computer to send the message to the first network address. The phrase identifies the sender (i.e., the mobile computer) and the destination (i.e., the first network address). The proximity of the concepts links them together, such that a natural reading of the phrase conveys the mobile computer sends the secure message to the first network address. That the claims use passive voice is of no import. The plain language establishes direct sending. The specification confirms this plain meaning. It describes how the mobile computer forms the secure message with “the destination address . . . of the intermediate computer.” The mobile computer then sends the message to that address. There is no passthrough destination address in the intermediate computer that the secure message is sent to before the first destination address. Accordingly, like the claim language, the written description describes the secure message as sent from the mobile computer directly to the first destination address. The court thereby affirmed that Apple’s claim construction argument failed and that Apple failed to show that those claims would have been obvious.

Next, the court reviewed dependent claim 4 of the '494 patent (which is similar to claim 5 of the '362 patent), where the claim recites:

4. The intermediate computer of claim 1, wherein the translation table includes two partitions, the first partition containing information fields related to the connection over which the secure message is sent to the first network address, the second partition containing information fields related to the connection over which the forwarded encrypted data payload is sent to the destination address.

The PTAB interpreted “information fields” in this claim to require “two or more fields.” Apple’s argument relied on FIG. 21 of Grabelsky, which disclosed a partition with only a single field. As such, the Board found Apple failed to show the combination taught this information. Moreover, the Board found Apple failed to show a motivation to modify the combination to use multiple fields. Apple challenges this finding as well as the Board’s construction of information fields. Apple claims that there is a presumption that a plural term covers one or more items. Apple suggests that patentees can overcome that presumption by using a word, like plurality, that clearly requires more than one time. The court found that Apple misstated the law.

The court stated that, in accordance with common English usage, the court presumes a plural term refers to two or more items. That presumption can be overcome when the broader context shows a different meaning applies. This is simply an application of the general rule that claim terms are usually given their plain and ordinary meaning. As such, the term “information fields” is plural, and thus, presumably requires more than one field. Nothing in the surrounding

claim language suggests otherwise. The specification additionally does not persuade the court to depart from the presumption that “information fields” refers to two or more fields.

While additional arguments in the case are discussed, the two occurrences above clearly illustrate the PTAB’s approach to defining claim language with their plain and ordinary meaning.

IV. Conclusion

When attempting to show that particular claims are obvious, it is important to deliberate on the language used in the claims in view of the broader claim context, the written description, and prosecution. The Federal Circuit’s affirming the PTAB decision holding that several dependent claims are not obvious shows that it one may find difficulty in manipulating language to map references onto the claim language to show obviousness. For example, the use of passive voice in a claim does not overcome the claim’s plain language indicating direct sending between claimed components. Also, a plural term is presumed to refer to two or more absent a clear disclosure to the contrary.