Keywords: Prosecution history; claim construction; after-developed technology; infringement.

General: Term "regularly received television signal," in claim of patent directed to searchable electronic television program guide in which "mixer" combines received television signal and signal generated by microcontroller, does not exclude digital technology from claim's coverage, even though televisions existing in 1985, when application was filed, could not receive digital signals, since claim language does not specify particular type of signal format, and existence of digital video data was know in art.

SuperGuide Corp. v. DirectTV Enterprises Inc.
69 U.S.P.Q.2d 1865 (Fed. Cir. 2004)
Decided February 12, 2004

I. Facts

SuperGuide Corporation ("SuperGuide") owns the three patents, which are U.S. Patent No. 4,751,578 ("the '578 patent"), U.S. Patent No. 5,038,211 ("the '211 patent"), and U.S. Patent No. 5,293,357 ("the '357 patent"). These three patents relate to interactive electronic program guides ("IPGs"). Specifically, the '578 patent relates to the storage in IPG memory and subset searching of a large volume of program schedule information. The '211 patent relates to the storage of only predesignated programming information until it is intentionally updated, while the '357 patent relates the conversion of the electronic program guide information into event timer information sequences that may be used to control a recording device. Gemstar Development Corporation ("Gemstar") is an exclusive licensee of these patents. DirectTV, Inc. ("DirectTV") operates satellite-broadcasting networks, and Hughes Electronics Corporation ("Hughes") and Thomson Consumer Electronics ("Thompson") manufacture systems that receive DirectTV broadcasts and process them for display on television. Echostar Communications Corporation ("Echostar") also broadcasts satellite transmissions and manufactures the systems used to receive and process the broadcast information.

On June 27, 2000, SuperGuide filed an infringement suit against DirectTV, Hughes, Thomson, and EchoStar, which will collectively be referenced as Echostar. Based on the License Agreement between SuperGuide and Gemstar, the District Court granted the motion by Echostar to implead Gemstar. Gemstar alleged that EchoStar infringed the '578 patent, '211 patent, and '357 patent, and cross-claimed against SuperGuide for breach of the License Agreement and declaratory relief. Based on this claim construction in the District Court, the Echostar filed a joint motion for summary judgment of non-infringement with respect to each of the patents, and Gemstar cross-moved for summary judgment of infringement. The District Court granted summary judgment of non-infringement for all asserted claims and products with the exception of two EchoStar models. The parties then filed a stipulation that SuperGuide would be unable to establish infringement of the two EchoStar models if the District Court's claim construction and summary judgment rulings were upheld on appeal. The District Court entered a final judgment on July 25, 2002, and the parties timely appealed. Accordingly, the present action relates to the appeal by SuperGuide and Gemstar of the grant of summary judgment in favor of EchoStar.

II. Issues

A. Whether the District Court erred by reading analog limitations into the claim of the '578 patent?
B. Whether the District Court erred in limiting the claimed term "to perform a search" in the '578 patent?

C. Whether the District Court erred in construing the term "at least one of" along with the term "and" in the claim of the '211 patent?

III. Discussion

A. Yes. The Federal Circuit noted that the basic issue for three of the terms of the '578 patent relate to the whether the claimed invention covers digital technology and signals. Specifically, the issue is whether the terms "Regularly received television signal," "radio frequency information," and "mixer" relate to analog and digital signals. In the District Court, it was noted that the only analog television signals were present in 1985, when the '578 patent was filed. Accordingly, the District Court reasoned that the terms in question were limited to analog television signals. As support for this reasoning, the court relied upon the specification and the state of the art in 1985.

Contrary to the District Court's claim construction, the Federal Circuit held that the District Court's construction of the apparatus claim in the '578 patent was erroneous because the District Court improperly relied on cases involving means-plus-function claims in relation to "after-arising technologies." Specifically, Federal Circuit stated that method and apparatus claims are not limited to the embodiments disclosed in the specification, but rather are defined by the language of the claims. Accordingly, the Federal Circuit reviewed the claims and determined that a specific type of signal was not defined in the claim language. Further, the Federal Circuit reviewed the specification and determined that analog and digital signals are described in the specification. Finally, the Federal Circuit reviewed the prosecution history and determined that the arguments to overcome the rejections were not based the type of signal. Thus, the Federal Circuit held that the claimed terms include both digital and analog signal types.

B. Yes. The Federal Circuit reviewed the District Court's claim construction for the term "a search on at least said updated television programming information contained in RAM." The District Court reviewed the specification and held that all of the RAM had to be searched according to the claim. Furthering this point, Echostar argued that the claim was limited during prosecution of the '578 by statements made to overcome certain rejections. Specifically, the '578 patentees distinguished their invention over a prior art reference by arguing that in their system a "search of all the coded information is carried out by the microcontroller." The Federal Circuit disagreed with Echostar's position and the District Court's construction of the claim.

To construe the term, the Federal Circuit turned to Webster's Dictionary to determine the ordinary and plain meaning of the term "search." The Federal Circuit found that the definition says nothing about how the search is to be conducted. Accordingly, the Federal Circuit held that the term does not have to search all of the RAM. The Federal Circuit then reviewed the specification and determined that this presumption of the ordinary and plain meaning was not contrary to the specification. Accordingly, the Federal Circuit held that all of the data does not have to be searched.

C. No. In construing the '211 patent, the District Court concluded that the term "at least one of" along with the term "and" means that the list is conjunctive. That is, the term means at a minimum for each category. SuperGuide contends that the claim phrase "at least one of" unambiguously requires the selection and storage of one or more of the four listed criteria, not one or more of each.

In reviewing the District Court's claim construction, the Federal Circuit turned to the dictionary to determine that the term "at least one of" means one or more. Further, the use of the term "and" to separate categories along with the term "at least one of" results in a conjunctive list. That is, the terms utilized together require that one or more of each category is present for the claim to be infringed. The Federal Circuit also reviewed the specification and determined that it did not rebut this presumption of the plain and ordinary meaning of the term, as defined by the Federal Circuit. As such, the Federal Circuit held that the District Court's construction of the claimed term is proper.