United States District Court,
S.D. New York.

TM PATENTS, L.P. and TM Creditors, L.L.C,
Plaintiff.
v.
IBM CORPORATION,
Defendant.

No. 97 Civ. 1529 (CM)

Dec. 17, 1999.

Action was brought for infringement of patented computer programs. Supplementing its initial opinion construing claims, 72 F.Supp.2d 370, the District Court, McMahon, J., held that phrase "one address element," called for in patent claim dealing with strategy for routing communications in massively parallel computer processors, meant one or more than one.

Claim construed.

5,212,773. Cited.

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Christopher A. Hughes, Christopher, Morgan & Finnegan, New York City, for Defendant.

SUPPLEMENTAL *MARKMAN* RULING

McMAHON**, District Judge.**

In the Court's opinion and order dated November 8, 1999, I asked the parties to supplement their initial presentations concerning the meaning of the phrase "one address element" in connection with my construction of disputed element iii in Claim 1 of Patent No. 5,212,773 (the '773 patent), so that I might test my preliminary conclusion that the word "one" encompassed both a single address element and a plurality of address elements. Once again, the parties have provided me with extremely lucid and helpful letters, for which I tender my thanks. It is a pleasure to work on what would otherwise be frighteningly complex issues with lawyers who extend every effort to make them comprehensible.

The meaning of the ubiquitous word "one" continues to trouble me, and I fear that the Federal Circuit's latest opinion on claim relinquishment, Elkay Mfg. Co. v. Ebco Mfg. Co., 192 F.3d 973, 52 USPQ 2d 1109 (Fed.Cir.1999)-inconveniently decided after our *Markman* hearing-does not really clarify matters, since it

can be read to support both parties' point of view.

In *Elkay,* the District Court had construed a claim limitation containing the words "an upstanding feeding tube ... to provide a hygenic flow path for delivering liquid from said inverted unpressurized container ... and for admitting air ... into said container" to encompass both a single tube that performed both functions and two tubes that performed the functions separately. The Federal Circuit reversed. The panel acknowledged (1) that the articles "a" and "an" are not necessarily limited to the singular, and also (2) that the written description, if qualified as a preferred (as opposed to the sole) embodiment, does not conclusively establish that the use of such articles was meant to exclude the plural. However, the appellate court concluded that such a restriction was mandated by the prosecution history of plaintiff's patent.

To understand what the Federal Circuit meant by its ruling, a fairly detailed review of this portion of the opinion is in order. The Court of Appeals started from the proposition that, as a matter of law, the prosecution history "limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance." Elkay, 52 U.S.P.Q.2d at 1112-13, 1999 WL 715101. It then noted that the Examiner had rejected the original claims corresponding to those in issue based on a prior patent (Krug) in view of yet another prior patent (Savage). The Krug patent described a beer dispensing apparatus with two separate feed tubes, one for pressurized air and one for beer. Savage described an apparatus that allowed a liquid feed tube to be connected to a collapsible bag so that air could not be introduced into the bag as the connection was made. Thus, it seemed clear that the Examiner's rejection of Elkay's application was squarely grounded in Elkay's possible use of multiple tubes. Elkay responded to this rejection by distinguishing Krug on the ground that, *inter alia,* Elkay claimed " *a* flow path ... for delivering liquid ... and admitting air" whereas Krug taught the use of separate tubes to perform those two functions. Elkay did not amend the language of its claim, but its argument emphasized the singular nature of the article "a" as used in its application.

The Federal Circuit discounted the fact that Elkay had not filed an amendment to its claim. The court found that the argument Elkay made to overcome the Examiner's objections was entitled to equal weight as amended language, and that this argument precluded Elkay from contending that its patent covered a device with more than one tube. Moreover, the Federal Circuit ruled that it was "irrelevant whether Elkay emphasized this argument at the time, or indeed whether Elkay had to relinquish an interpretation of the feed tube limitation that could cover more than one flow path for liquid and air." *Id*. As long as Elkay made the argument in order to overcome the rejection, it necessarily conceded the point. Finally, the Court noted:

Elkay's argument that its statement distinguishing Krug on the basis of Krug's use of separate feed tubes was insignificant is particularly unpersuasive in view of the Examiner's response to that statement. In the Examiner's Statement of Reasons for Allowance, dated March 30, 1993, the Examiner wrote that he allowed claim 22 (i.e., claim 7 in the '531 patent) because he understood the claim to describe a single feed tube with a single flow path for both liquid and air: [Examiner's Statement omitted].

As noted above, both parties find comfort in the Federal Circuit's reasoning. IBM argues that *Elkay* stands for a relatively simple and straightforward proposition: once TM amended the claim language, which originally read "at least one message element," to read "one message element," it was precluded from taking the position that the word "one" meant "one or more than one." For a neophyte like myself, there is considerable appeal to this argument. If I could read *Elkay* to preclude me from relying on anything in the file wrapper except amended language where an amendment is made, I would find that IBM was correct without further analysis.

But the *Elkay* court carefully stated that "[I]t is the *totality* of the prosecution history that must be assessed, not the individual segments of the presentation made to the Patent and Trademark Office by the applicant" *Id*. (emphasis added). There is much in the file wrapper that seems to support TM's position.

The Examiner originally rejected the claims that eventually became the '773 patent by Office Action sent June 22, 1991. The Examiner relied on three grounds: first, the claims were indefinite (under 35 U.S.C. s. 112(b)); second, certain claims (including independent Claims 2 and 8, which, in their amended version, are in suit here) were anticipated by prior art, namely the Lawrence patent (under 35 U.S.C. s. 102); and third, those claims that were not anticipated were obvious in light of Lawrence. This last objection appears to be directed particularly at Claims 3 and 9 or the original patent application, which are not in suit before me.

In response to the rejection, TM did two things: it amended its claim language in multiple respects (including the substitution of "one" for "at least one" in the claims here in suit), and it submitted an argument to the Examiner. It appears that much of the amended language was designed to overcome the Examiner's complaint about indefiniteness, which he made as to all the claims. TM's argument, however, distinguished Lawrence, and it did so by doing precisely what TM did at the *Markman* hearing-it contrasted Lawrence's use of a store-and-forward process with TM's use of wormhole routing. Unlike the applicant in *Elkay*, TM did not focus at all on the difference between "at least one" (as used in its original independent claim) and "one" (as used in the amended claim). Rather, it argued that the difference between the two patents was how much of a message the router node in TM's computer system needed to receive before it could forward the message to the next point. TM emphasized that the store-and-forward system disclosed in Lawrence required arrival of the entire message before it would route the message to the next node, while TM's "wormhole routing" scheme would start the message on its way as soon as it decoded "enough of a message" to recognize where the message ought to go. (A 2110.)

As I noted in my original opinion, the Examiner specifically relied on this concept of forwarding a message as soon as the node switch received "enough of a message" to recognize its destination when it allowed the claim. Indeed, the Examiner stated that he viewed TM's argument as "persuasive." (A.2113) In *Elkay*, an Examiner's response to a patentee's argument in its Statement of Reasons for Allowance was deemed a particularly persuasive piece of evidence. *See id*. Since the Examiner in this case responded by finding TM's argument compelling, I cannot think of why I ought not do so. Clearly, the patent was allowed because of the difference between store-and-forward and wormhole routing, not because of the change from "at least one" to "one." This interpretation of the claim history explains why, when TM amended its claim language, it did not also change the embodiment described in the specifications, which all parties agree would be read out of the patent if IBM's literal reading of the word "one" were to prevail.

Unfortunately, I cannot stop yet. For there is other language on this one page of the *Elkay* decision that would seem to favor IBM's position. The *Elkay* panel stated that it was irrelevant whether Elkay could have obtained its patent without relinquishing the two-tube interpretation of its claim: if in fact that claim was relinquished, it is gone. *See id*. IBM contends that TM relinquished the claim to "at least one" simply by deleting that language from its revised claims and substituting therefor the singular word "one." While it may have done so without needing to, IBM argues, TM did it and must live with the consequences. As I noted in my original decision, that argument is clear, simple and logical, and therefore quite persuasive-even in the patent context, where the singular can sometimes encompass the plural.

TM counters with two arguments. First, it claims that *Elkay* concerns only the effect of arguments made to

the Patent Office, as opposed to claim amendments. I find this contention less than persuasive. The *Elkay* court opinion includes the following statement: "Arguments made during the prosecution of a patent application *are given the same weight as claim amendments*." *Id*. (emphasis added). If an applicant can relinquish a claim by arguing that the claim language does not encompass it, he can just as easily relinquish a claim by amending his claim language to eliminate it.

TM's other point has more merit. TM reminds this Court that in York Products Inc. v. Central Tractor Farm & Family Center, 99 F.3d 1568, 1575 (Fed.Cir.1996), the very same Federal Circuit held, "Unless altering claim language to escape rejection, a patent applicant only limits claims during prosecution by *clearly* disavowing claim coverage." It argues that the change in language simply eliminated excess verbiage in a "comprising" claim-i.e., one that "includes" the specifically listed limitations and nothing else. Therefore, the language change cannot be read as a clear disavowal of the plurality claim.

This argument, too, has a certain elegance and appeal. In *Elkay*, the patentee's emphasis on the singularity of the article "a" in his argument necessarily implied that he was relinquishing any claim to a two-tube system. Ours, unfortunately, is not a case where the patentee's intention to relinquish is similarly clear. Given patent law's unusual "singular-encompasses-the-plural (sometimes)" rule, eliminating words of plurality may not necessarily indicate the patentee's intention to abandon plurality claims-especially where, as here, other evidence in the file wrapper (especially the preferred embodiment) suggests that the patentee is not relinquishing such claim.

IBM responds that the change in language must have been made to overcome the prior art as disclosed in Lawrence, because Celeritas Techs. Ltd. v. Rockwell Int'l Corp., 150 F.3d 1354 (Fed.Cir.1998), *cert. denied,* 525 U.S. 1106, 119 S.Ct. 874, 142 L.Ed.2d 774 (1999), held that a claim is anticipated if (and only if) "each and every limitation is found either expressly or inherently in a single prior art reference." Id. at 1361. IBM notes that original Claims 2 and 8 required that, for each message (which includes a series of message elements including at least one address element and at least one data element), the switch decod[es] at least one address element to identify an output circuit for that message. Those claims were rejected "as being clearly anticipated by" Lawrence '892. To IBM, that means the Examiner rejected TM's claims because the Lawrence patent either expressly or inherently disclosed a switch that decoded at least one address element of a series of message elements (including at least one address element and at least one data element) in order to route the message.

However, IBM's reasoning does not really address TM's argument, at least as this Court understands TM's argument. TM does not disagree that both patents disclose a switch that decodes at least one message element in order to route a message-Lawrence at the specification at column 18, line 11-63 of the patent and Figure 15 (A.2172, 2183) and TM in its specification. FN1 But there is a critical difference between the two patents: Lawrence will not transmit the message to its destination until the entire message is received at one point in the system, while '773 will transmit the message without waiting for the tail end to catch up to the front. That is what makes '773 a significant improvement over the prior art. Nothing in *Celeritas* or any other case that has been brought to the Court's attention precludes patentability when an old concept (decoding address elements in order to forward a message within a massively parallel processor) is carried out in a new and materially improved way (wormhole routing as opposed to store and forward). This, while IBM is correct that "Anticipation under Section 102 can be found only when the reference discloses exactly what is claimed...." Titanium Metals Corp. of America v. Banner, 778 F.2d 775, 780 (Fed.Cir.1985), it is wrong in supposing that TM could not overcome the Examiner's literalist approach to anticipation by pointing out where the critical distinction between the two routing systems lay. Focusing only on the literal

terms of the two computer systems, the Examiner found anticipation because he did not understand the difference between store and forward (Lawrence) and wormhole routing ('773). Once he understood that difference, he had no difficulty concluding that '773 represented a significant and patentable improvement over Lawrence-regardless of the number of address elements that had to be decoded under each patent in order to identify a message's destination.

FN1. The Court finds it interesting that neither party disclosed the decoding of multiple address elements in its claim limitations, but relied on that particular feature only in describing the preferred embodiment.

TM also calls the Court's attention to another portion of the file wrapper, one that was not addressed in the parties' initial submissions. When the Examiner rejected Claims 2 and 8 on the ground that Lawrence anticipated them (discussed above), he also rejected dependent Claims 3 and 9, where messages had only one address element. (A.2097) IBM correctly points out that Claims 3 and 9 were not rejected on the ground of anticipation, but rather on the ground of obviousness. FN2 After reviewing the Examiner's reasons for rejection, I cannot say that either TM's argument derived from same or IBM's response to that argument adds anything to the equation.

FN2. I wish that TM had never brought this section to my attention, because deciphering it has caused the Court no end of grief. As far as I can determine, the Examiner concluded that a message could only have one address element if it were in a two-processor system-in which case, there would only be one place for the message to go. Indeed, the Examiner repeated several times that the situation disclosed in Claims 3 and 9 could only arise in a two-processor computer system-a fact that obviously bothered him no end. I do not think that his rejection sheds any light whatever on the present problem.

The Court has taken a stream of consciousness approach to this question, but it was the best way to arrive at an answer. And the answer is that I was correct in the first instance. I might wish that TM had not made the particular verbiage change that has given me and the parties so much agida, and I suspect TM wishes it had not done so as well. However, looking at the entire file wrapper (as *Elkay* instructs), I am constrained to conclude that the language change from "at least one" to "one"-viewed (1) in the context of a "comprising" claim, (2) in light of the disclosed specification, and (3) in view of the distinction between '773 and Lawrence that was argued by TM and accepted by the Examiner-was not made to overcome prior art and does not preclude a finding that the phrase "decoding one address element" includes "decoding at least one address element."

The Court's original ruling on this matter stands.

The parties are directed to participate in a teleconference to discuss next steps in this matter on December 22 at 9:30 AM.

S.D.N.Y.,1999.
TM Patents, L.P. v. IBM Corp.