United States District Court, E.D. Texas, Sherman Division.

ALCATEL USA, INC. and USA L.P,

v.

TEKELEC, INC.

No. 4:00cv303

March 5, 2002.

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# MEMORANDUM OPINION AND ORDER CONSTRUING CERTAIN CLAIMS OF U.S. PATENTS NOS. 6,006,098 AND 6,097,960

PAUL BROWN, District Judge.

On August 8, 2001, the Court conducted a hearing pursuant to the requirements of Markman v. Westview Instruments, Inc., 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). Having carefully considered the parties' briefs, the testimony and exhibits admitted into evidence, Patents Nos. 6,006,098 ("the '098 patent") and 6,097,960 ("the '960 patent"), and the argument of counsel, the Court now makes the following findings and construes the disputed claims as follows.

#### STANDARD FOR CONSTRUING CLAIM TERMS

In Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed.Cir.1995) ( "Markman I" ), the Federal Circuit held that claim construction is a matter of law. In affirming this decision, the Supreme Court in Markman v. Westview Instruments, Inc., 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996) ( "Markman II" ), stated, "[W]e hold that the construction of a patent, including terms of art within its claims, is exclusively within the province of the court," Id. at 1387, and "... judges, not juries, are the better suited to find the acquired meaning of patent terms." Id. at 1395.

The duty of the trial judge is to determine the meaning of the claims at issue, and to instruct the jury accordingly. In the exercise of that duty, the trial judge has an independent obligation to determine the meaning of the claims, notwithstanding the views asserted by the adversary parties. (citations omitted)

Exxon Chemical Patents, Inc. v. Lubrizoil Corp., 64 F.3d 1553, 1555 (Fed.Cir.1995).

In performing this task, this Court is guided by the following precepts. The claims should be construed in light of the ordinary meaning of the claim language, as well as the patent specification and prosecution history. Markman I, 52 F.3d at 979-80; *see also* Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996).

The Court should first look to the intrinsic evidence of record, that is, the patent itself, including the claims, the specification, and, if in evidence, the prosecution history. *See* Markman I, 52 F.3d at 979; Vitronics Corp., 90 F.3d at 1576. Extrinsic evidence may, however, be considered if needed to assist in determining the meaning or scope of technical terms in the specification or claims to one of ordinary skill in the art. *Vitronics* at 1583.

A dictionary is not prohibited extrinsic evidence, and is an available resource of claim construction. Although a dictionary definition may not enlarge the scope of a term when the specification and the prosecution history show that the inventor, or recognized usage in the field of the invention, have given the term a limited or specialized meaning, a dictionary is often useful to aid the court in determining the correct meaning to be ascribed to a term as it was used.

Vanguard Products Corp. v. Parker Hannifin Corp., 234 F.3d 1370 1372 (Fed.Cir.2000).

Claims must be read in view of the specification, of which they are a part. Autogiro, 384 F.2d at 397, 155 USPQ at 702; see Winans v. Denmead, 56 U.S. (15 How.) at 338; Bates v. Coe, 98 U.S. at 38-39. The specification contains a written description of the invention that must enable one of ordinary skill in the art to make and use the invention. For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims.

Markman I, 52 F.3d at 979.

The most recent teaching of the Federal Circuit on how guidance as to the meaning of claims can be found in the written description may be found in Scimed Life Systems v. Advanced Cardiovascular, 242 F.3d 1337 (Fed.Cir.2001).

While it is true, of course, that "the claims define the scope of the right to exclude" and that "the claim construction inquiry, therefore, begins and ends in all cases with the actual words of the claim," Renishaw PLC, 158 F.3d at 1248, 48 USPQ 2d at 1121, the written description can provide guidance as to the meaning of the claims, thereby dictating the manner in which the claims are to be construed, even if the guidance is not provided in explicit definitional format.

As a general rule, patent claims must be interpreted to sustain their validity if possible. Quantum Corp. v. Rodime PLC, 65 F.3d 1577, 1584 (Fed.Cir.1995).

#### **THE** '098 PATENT

The invention of the '098 Patent is related to a system and method for application location register (ALR) routing in a telecommunications network. The background of the invention in column 1 of the patent recites,

Wireless or Personal Communications Service (PCS) providers have been, until recently, able to store and

maintain subscriber information and current location data on only one home location register (HLR). However, due to the escalating number of subscribers and the rapid expansion of the wireless (PCS) communications networks, it has become necessary to employ multiple home location registers to accommodate the growth.

By using multiple home location registers in the wireless communications network, it becomes necessary to devise a system and method to route the query messages and location updates to the proper home location register.

The summary of the invention in the '098 patent states in part:

Accordingly, a need has arisen for a solution to the application location register routing problem for multiple home location registers. The teachings of the present invention provides a system and method for application location register routing which addresses this problem.

#### **DISPUTED CLAIM TERMS OF THE** '098 PATENT

The '098 patent contains a total of 26 claims. In its complaint, Alcatel contends that Tekelec is infringing one or more of these claims. Claim 1 of the '098 patent reads as follows:

1. A method for application location register routing processing in a wireless telecommunications network, comprising the steps of:

at a signal transfer point, receiving a query message requesting for information related to a specific mobile telecommunications customer from a query originator;

decoding the query message and obtaining a translation type and a global title address therefrom;

looking up the translation type in a first database residing in the signal transfer point and determining a location of a second database residing in the signal transfer point for processing the query message;

looking up, using at least a predetermined portion of the global title address, in the second database residing in the signal transfer point and obtaining a network address of a destination for processing the query message; and

forwarding the query message to a network node in the wireless telecommunications network specified by the network address.

The parties first dispute the import of the preamble. Alcatel contends that the preamble should be construed with the remainder of the claim as one unified and internally consistent recitation of the claimed invention and that it is necessary to give life, meaning and vitality to the claim. Tekelec argues that it is not a part of the claim, but only a description of the purpose and intended use of the method.

The Federal Circuit in *Pitney Bowes, Inc. v. Hewlett Packard Co.*, 102 F.3d 1298, 1305 (Fed.Cir.1999), *quoting Kropba v. Robie*, 187 F.2d 152, held "if the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is necessary to give life, meaning and vitality to the claim, then the claim preamble should be construed as if in the balance of the claim." The

Court finds that the claim preamble is necessary to give life, meaning and vitality to the claim. The preamble introduces terms later referred in elements 1c and 1e of the claim, more specifically, "processing" in element 1c and the wireless telecommunications network in element 1e. Tekelec asserts that had ALR routing processing been intended as the type of processing going on in element 1c, it would have been referred to as "said processing" or "the processing." The Court disagrees. The Court reads "processing" as used in element 1c to refer back to application location register routing processing in the preamble and, likewise, reads the wireless telecommunications network in element 1e to refer back to the wireless telecommunications network in the preamble. The preamble, therefore, is "intimately meshed with the ensuing language in the claim" and should be construed with the remainder of the claim "as one unified and internally consistent recitation of the claimed invention." *Pitney Bowes*, 182 F.3d at 1306.

Having found that ALR routing processing is a part of claim 1, the Court must now determine the meaning of this term. ALR routing processing, as recited in the preamble to Claim 1 of the patent, had no previous meaning to those of ordinary skill in the art. It is a coined term of the inventors. Its meaning, then, must be found somewhere in the patent. J.E. Eaton & Co. v. Atlantic Paste & Glue Co., 106 F.3d 1563, 1568 (Fed.Cir.1997). The written description can provide guidance as to the meaning of this term, even if the guidance is not provided in the explicit definitional format. Scimed Life Systems, 242 F.3d at 1344. In this case the written description makes clear that ALR routing processing is processing required for routing query messages to multiple home locations registers (HLRs). Tekelec contends that the term is not defined or inadequately defined in the patent. The patent states in the summary of the invention, "a need has arisen for a solution of the application location register routing problem for multiple home location registers." Column 1:46-48. In the detailed description of the invention in the patent, this language is found: "when the wireless service provider requires the use of multiple home location registers, an application location register database is needed to identify the home location register that maintains a particular subscriber's service information." Column 3:22-26. Tekelec argues that ALR routing is only a generic term and is not limited to routing the messages on a subscriber-by-subscriber basis, and that there is no indication of how the query message is subsequently routed or stored, that it can be on a range basis or a subscriber-bysubscriber basis. The specification, particularly Column 3:22-26 and Column 5:14-18, supports the conclusion that the messages are stored and/or routed on a subscriber-by-subscriber basis.

When the term "ALR routing processing" is read in view of the specification, the Court concludes that the inventors intended the term to mean processing required for routing query messages to multiple home location registers, short message service centers, and the like. While the Court can neither broaden nor narrow the claims to give the patentees something different than what is set forth in the claim, "it is equally 'fundamental that claims are to be construed in the light of the specifications and both are to be read with a view to ascertaining the invention.' "Bell Communications v. Vitalink Communications, 55 F.3d 615, 620 (Fed.Cir.1995).

The Court construes ALR routing processing to mean "processing required for routing query messages to multiple home location registers (HLRs), short message service centers (SMSCs), or the like, on a mobile subscriber-by-subscriber basis." ALR routing is not synonymous with generic routing of query messages.

# Claim Element la

The parties next dispute the meaning of "query message requesting for information related to a specific mobile telecommunications customer."

Alcatel proposes: mobile customer initiated service queries that pertain to information stored in HLRs, SMSCs, or the like, on a mobile subscriber-by-subscriber basis.

Tekelec proposes: The query message is related to a specific subscriber, but there is no indication of how the query message is subsequently routed or stored (be it on a range basis or a subscriber-by-subscriber basis).

The Court's previous interpretation of the meaning of ALR routing processing supports Alcatel's proposal. The term should be construed as proposed by Alcatel.

## **Claim Element lb**

Decoding the query message and obtaining a translation type(4) and a global title address (5) therefrom.

# **Translation type**

The parties disagree over the meaning of "translation type."

Alcatel proposes: the type of translation, which may be represented by various indicators in the query message, including the parameter known as the "translation type."

Tekelec proposes: the specific parameter known as "translation type" in the Signaling Connection Control Part (SCCP) of the query message, and nothing else.

Alcatel argues that "translation type" means the type of translation which may be represented by various indicators in the query message, including the parameter known as the "translation type." Alcatel contends that "translation type" refers generally to a type of translation and that in the context of the patent, the type of translation may be represented by various indicators in the SCCP called party address part of the query message.

In response, Tekelec argues that "translation type" has a very precise meaning in the art of telecommunications signaling. In support of this argument, Tekelec offered expert testimony and submitted a number of standard industry publications. Included in these publications were the Belcor requirements, which are standard requirements followed by Alcatel. "Translation type" has a precise meaning in these publications. Alcatel responds that this is extrinsic evidence and should not be considered by the Court. The Court disagrees. The Federal Circuit explained in Pitney Bowes, Inc. v. Hewlett Packard Co., 182 F.3rd 1298, 1309:

"It is entirely appropriate, even preferable, for a Court to consult trustworthy extrinsic evidence to ensure that the claim construction it is tending to from the patent file is not inconsistent with clearly expressed, plainly apposite, and widely held understandings in the pertinent technical field."

This holding was reaffirmed in AFG Indus., Inc. v. Cardinal IG Co., Inc., 239 F.3d 1239, 1249 (Fed.Cir.2001).

The Court has concluded that the term "translation type" should be construed as follows:

"the specific parameter known as 'translation type' in the signaling connection control part (SCCP) of the query."

# **Global Title Address**

The parties disagree over the meaning of the term "global title address."

Alcatel proposes: an address in the query message that does not explicitly contain information that would allow routing in the network, but which contains information, such as IMSI or MSISDN number, that may be used to obtain routing information.

Tekelec proposes: the specific parameter known as "global title address" in the SCCP called party address part of the query message, and nothing else.

Alcatel contends that based on the term's ordinary meaning as used in the patent, "global title address" is an address in the query message that does not explicitly contain information that would allow routing in the network, but which contains information such as IMSI or MSISDN number that may be used to obtain routing information. Tekelec responds that "global title address" has a precise meaning and is "the parameter known as the 'global title address' that is contained in the FCCP called party address part of the query message." The Court disagrees with Tekelec's proposed construction. *Newton's Telecom Dictionary*, 17th Edition, is helpful in construing this claim. It does not contain a definition of "global title address," but does define global title as:

An address such as customer-dialed digits that does not explicitly contain information that would allow routing in the SS7 signaling network, that is, the GTT (Global Title Translation) function is required.

This definition, along with a reading of the claim term in view of the specification, supports Alcatel's proposal. The Court construes the term as proposed by Alcatel.

## **Claim Element 1c**

Looking up the translation type in a first database(6) residing in the signal transfer point and determining a location of a second database residing in the signal transfer point for processing the query message (7).

The parties disagree first over the meaning of first database.

Alcatel proposes: a lookup table or database that lists the database identifier or location of the second database. There is no requirement that only translation type is looked up.

Tekelec proposes: a database in which, using only a translation type, the location of a second database can be determined.

The language of the claim element is clear and supports Tekelec's proposal. The Court adopts Tekelec's proposal.

The parties also disagree over the meaning of "processing the query message."

Alcatel proposes: "processing" refers to ALR routing processing.

Tekelec proposes: "processing" is defined by its ordinary meaning and does not require a special definition.

The Court has already determined that claim 1 is for a method of ALR routing processing and defined ALR routing processing. The Court, therefore, adopts Alcatel's proposal.

## **Claim Element 1d**

Looking up, using at least a predetermined portion of the global title address, (8) in the second database (9) residing in the signal transfer point and obtaining a network address of a destination for processing the query message; and

The parties disagree over the meaning of "at least a predetermined portion of the global title address" and "second database."

At Least A Predetermined Portion of the Global Title Address

Alcatel proposes: part or all of a global title address alone or in combination with other items or parameters.

Tekelec proposes: part or all of the global title address, nothing more.

The plain wording of this claim element does not suggest that it is limited to part or all of the global title address. This in an "open" claim, and the claim element requirement that at least a part of the global title address be used does not exclude other items or parameters. The Court adopts Alcatel's proposal.

# **Second Database**

The parties also disagree on the meaning of "second database."

Alcatel proposes: an ALR routing database, which is one or more tables or databases that match IMSI or MSISDN numbers corresponding to a specific mobile telecommunications subscription to the network address of the specific HLR, SMSC or any other service associated with the mobile telecommunications subscription, when the wireless service provider requires the use of multiple HLRs, multiple SMSCs, or the like.

Tekelec proposes: a database in which at least a predetermined portion of the global title address is used to obtain a network address of a destination for processing the query message.

The Court has concluded that the "second database" is used for processing the query message and that the processing recited in element 1c refers to (ALR) routing processing. The written description explains, in the context of the invention, the "second database" having network addresses specifying the destinations of the query messages is the ALR database. When multiple home location registers are required, an application location register database is needed to identify the home location register that maintains a particular subscriber's service information.

The Court construes the "second database" to mean:

"a database that matches IMSI to MSISDN numbers corresponding to a specific mobile telecommunications subscription to the network address of the specific HLR, SMSC or any other service associated with the mobile telecommunications subscription, when the wireless service provider requires the use of multiple

HLRs, multiple SMSCs, or the like."

#### Claim Element 1e

Forwarding the query message to a network node in the wireless communications network (10) specified by the network address.

The parties disagree over the meaning of "forwarding the query message to a network node in the wireless telecommunicates network."

Alcatel proposes: the mobile customer initiated service query, which pertains to information stored in HLRs, SMSCs, or the like, is forwarded to a node in the wireless telecommunications network, such as an HLR or SMSC.

Tekelec proposes: the query message is routed to a device in the wireless telecommunications network that performs a network function.

Based on the wording of the claim element when read in view of the specification, the Court construes this term as follows:

"the query message is forwarded to a node in the wireless telecommunications network, such as an HLR or SMSC."

# Claim 2

The method, as set forth in claim 1, wherein the query message receiving step comprises the step of receiving a query message containing a location update of a mobile telecommunications customer.

The parties are in disagreement over the meaning of "a location update" found in this claim.

Alcatel proposes: a query message that alerts the HLR of the mobile telecommunications customers' current location and the MSC that is currently serving the customer.

Telelek proposes: the query message is specifying a specific service to be performed by the network node-a location update service for a mobile telecommunications customer.

The claim when read in the light of the specification convinces the Court that "a location update" of a mobile telecommunications customer is a query message that alerts the HLR of the mobile telecommunications customer's current location and the MSC that is currently serving the customer. The Court adopts Alcatel's proposal for the construction of this term.

#### Claim 3

The method, as set forth in claim 1, wherein the query message receiving step comprises the step of receiving a send routing information query message.

The parties disagree on the meaning of "a send routing information query message."

Alcatel proposes: a query message intended for an HLR that seeks to obtain a response, information necessary to route a wireless call to a particular mobile telecommunications unit.

Tekelec proposes: the query message is specifying a specific service to be performed by the network node-a send routing information service.

The Court is convinced from the plain wording of this claim that the claim should be construed as proposed by Alcatel, and its proposal should be adopted.

## Claim 4

The method, as set forth in claim 1, wherein the query message receiving step comprises the step of receiving a forward short message request.

The parties disagree on the meaning of "a forward short message request."

Alcatel proposes: a query message intended for an SMSC that seeks to send a short message to a particular mobile telecommunications unit.

Tekelec proposes: the query message is specifying a specific service to be performed by the network node-a forward short message service.

The Court is persuaded from the plain wording of the claim when read in view of the specification (See Column 4:49-51) that:

"forward short message request" is a query message intended for an SMSC that seeks to send a short message to a particular mobile telecommunications unit.

The Court, therefore, adopts Alcatel's proposal.

#### Claim 5

The method, as set forth in claim 1, wherein the first database lookup step further comprises the step of looking up in the first database for a location of a processor residing in the signal transfer point having access to the second database.

The parties disagree on the meaning of "looking up in the first database for a location of a processor residing in the signal transfer point having access to the second database."

Alcatel proposes: the translation type is looked up in a first database to determine a location of a processor residing in the signal transfer point having access to the second database.

Tekelec proposes: using only a translation type, the location of a processor can be determined, the processor residing in the signal transfer point and the processor having access to the second database.

The Court agrees with Alcatel that the plain wording of the additional limitation of claim 5 when read in light of the Court's construction of claim 1 supports Alcatel's proposed construction and it is, therefore, adopted by the Court.

#### Claim 6

The method, as set forth in claim 5, further comprising the step of routing the query message to the processor in response to the location obtained from the first database.

The parties have agreed, and the Court adopts this construction, that the term "routing the query message to the processor" should be construed to mean:

"the query message is routed to the processor in response to the location obtained from the first database."

#### Claim 7

The method, as set forth in claim 5, further comprising the step of routing at least a predetermined portion of the query message to the processor in response to the location obtained from the first database.

The parties disagree on the term "at least a predetermined portion of the query."

Alcatel proposes: part of the query message, all of the query message, or all of the query message combined with something else.

Tekelec proposes: part or all of the query message, nothing more.

From the plain wording of this claim, the Court has concluded that Alcatel's proposal is correct and it is adopted by the Court.

## Claim 8

The method, as set forth in claim 5, further comprising the step of routing at least the predetermined portion of the global title address to the processor in response to the location obtained from the first database.

The parties have agreed that the term "routing at least the predetermined portion of the global title address to the processor in response to the location obtained from the first database" should be construed to mean:

"at least a predetermined portion of the global title address is routed to the processor in response to the location obtained from the first database."

and this construction is adopted by the Court.

# Claim 9

The method, as set forth in claim 1, further comprising the step of looking up in one or more second databases residing in the signal transfer point for obtaining the network address of the destination for processing the query message.

The parties have agreed that the term "looking up in one or more second databases residing in the signal transfer point for obtaining the network address of the destination" should be construed to mean:

"a network address of a destination is looked up in one or more second databases,"

and this construction is adopted by the Court.

## Claim 10

The method, as set forth in claim 1, wherein the query message forwarding step comprises the step of forwarding the query message to a home location register specified by the network address.

The parties have agreed that the term "forwarding the query message to a home location register" should be construed to mean:

"the query message is forwarded to a HLR specified by the network address,"

and this construction is adopted by the Court.

#### Claim 11

The method, as set forth in claim 1, wherein the query message forwarding step comprises the step of forwarding the query message to a short message service center specified by the network address.

The parties have agreed that the term "forwarding the query message to a short message service center" should be construed to mean:

"the query message is forwarded to a SMSC specified by the network address,"

and this construction is adopted by the Court.

# Claim 12

The method, as set forth in claim 1, wherein the decoding step comprises the step of decoding the global title address in the SCCP called party address of the query message.

The parties have agreed that the term "decoding the global title address in the SCCP called party address of the query message" should be construed to mean:

"the global title address in the SCCP called party address of the query message is decoded,"

and this construction is adopted by the Court.

## Claim 13

[Preamble] (1) A system for application location register routing (2) in a wireless telecommunications network, comprising:

The parties disagree as to whether "application location register (ALR) routing" is a part of the claim.

Alcatel proposes: yes, the preamble recited claim limitations because it is necessary to give life and

meaning to the claim, and it introduces terms which the claim later refers to in element [13c] ("application location register routing").

Tekelec proposes: no, "ALR routing" in the preamble is not a claim limitation because the body of the claim fully and intrinsically sets forth the complete invention, and the preamble merely states a purpose or intended use.

Using the same reasoning the Court used in determining that the preamble to claim 1 was a part of the claim, the Court has concluded that the preamble to claim 13 is also a part of the claim.

If ALR routing is a claim limitation the parties propose the following:

Alcatel proposes: routing query messages to multiple home location register (HLRs), short message service centers (SMSCs), or the like, on a mobile subscriber-by-subscriber basis ALR routing is not synonymous with generic routing of query messages, which are always subscriber-specific messages, such that generic routing is routing of subscriber-specific messages to a network node.

Tekelec proposes (conditionally): routing subscriber-specific messages to a network node. ALR routing is not limited to HLRs or SMSCs, nor is it limited to routing the messages on a subscriber-by-subscriber basis.

Following the same reasoning used in construing claim 1, the Court has concluded that the claim when read in view of the specification supports the following construction:

routing query messages to multiple home location register (HLRs), short message service centers (SMSCs), or the like, on a mobile subscriber-by-subscriber basis. ALR routing is not synonymous with generic routing of query messages.

## Claim Element 13a

A first cluster of processors (3) adapted for receiving a query message requesting for information related to a specific mobile telecommunications customer (4) from a query originator;

The parties disagree over the meaning of "first cluster of processors."

Alcatel proposes: more than one processor that receive a query message requesting for information related to a specific mobile telecommunications customer. The processors are not necessarily connected to a common network.

Tekelec proposes: a group of processors connected to a common network that receive a query message requesting for information related to a specific mobile telecommunications customer.

The plain wording of the claim element supports the construction proposed by Alcatel, and the Court adopts this construction. The Court can find no basis for reading a requirement in this element that the processors be connected to a common network.

The term "query message requesting for information related to a specific mobile telecommunications customer" is construed by the Court the same as it was construed in claim element la.

## Claim Element 13b

A first database (5) being accessible (6) by the first cluster of processor and having location information of a second database.

- The term "a first database" is construed by the Court the same as it was construed in claim element 1c.
- The parties disagree over the term "accessible."
- Alcatel proposes: the first cluster of processors is connected to the first database within the STP.
- Tekelec proposes: the first cluster of processors can read to and/or write from the first database.
- The plain wording of the claim element supports Tekelec's proposal and it is adopted by the Court.

#### Claim Element 13c

A second cluster of processors co-located with the first cluster of processors and being adapted for receiving at least a portion of the query message from the first cluster of processors, (7) the second cluster of processors being dedicated to process application location register routing; (8) and

Alcatel proposes: more than one processor, located together with the first cluster of processors, that have been programmed to handle ALR routing and which receive part or all of a query message, which may include a IMSI or a MSISDN number corresponding to a specific mobile telecommunications subscription or customer.

- Tekelec proposes: a group of processors, located together with the first cluster of processors, that receive part or all of the query message from the first cluster, and that are dedicated to process application location register routing.
- The plain wording of the claim element supports Tekelec's proposal, and it is adopted by the Court.
- The parties disagree over the meaning of the word "dedicated."
- Alcatel proposes: The processors are not limited to performing only ALR routing.
- Tekelec proposes: The processors are only used for application location register routing.
- The Court adopts Tekelec's proposal. "Dedicated" would ordinarily mean "set aside for a particular use or purpose." There is nothing in the claim or the specification that would suggest that the inventors intended for the word "dedicated" to mean dedicated to more than one function.

#### Claim Element 13d

A second database (9) being accessible by the second cluster of processor and having network addresses specifying the destination of query messages, the second cluster of processors obtaining the network addresses from the second database and forwarding the network address to the first cluster of processors.

The Court construes "a second database" to mean the same as it is construed in claim element 1d.

# Claim 14

- The system, as set forth in claim 13, wherein the first and second cluster of processors and the first and second databases reside in a signal transfer point.
- The parties have agreed that "reside in a signal transfer point" means:
- both clusters are connected together by a network internal to the STP,
- and the Court adopts this construction.

# Claim 15

- The system, as set forth in claim 13, further comprising a message transport network coupled to the first and second clusters of processors and adapted for routing messages therebetween.
- The parties agree that "a message transport network" means:
- "a network that allows messages to be routed between the first and second cluster of processors,"
- and the Court adopts this construction.

# Claim 16

- The system, as set forth in claim 13, wherein the second cluster of processors comprises pairs of redundant processors.
- The parties have agreed that "redundant processors" means:
- "more than one processor, that operates in a stand-by, backup, or load sharing mode,"
- and this construction is adopted by the Court.

# Claim 17

- The system, as set forth in claim 16, wherein one of the pairs of processors is a backup processor of the other processor.
- The parties have agreed that "one of the pairs of processors is a backup of the other processor" means:
- "one of the pair of redundant processors performs the function of the other of the pair of processors if the one processor fails,"
- and this construction is adopted by the Court.

#### Claim 18

The system, as set forth in claim 16, wherein one of the pairs of processors perform in a load sharing manner.

The parties have agreed that "one of the pairs of processors perform in a load sharing manner" means:

"the processing functions are shared between the pairs of redundant processors,"

and this construction is adopted by the Court.

#### Claim 19

The system, as set forth in claim 13, further comprising an administration cluster of processors coupled to the first and second clusters of processors.

The parties have agreed that "an administration cluster of processors" means:

"processors that enable maintenance and administrative functions to be performed,"

and this construction is adopted by the Court.

# Claim 20

The system as set forth in claim 19, wherein the administration cluster of processors is coupled to a service management system.

The parties have agreed that "coupled to a service management system" means:

"a system that allows maintenance and administrative functions to be performed,"

and this construction is adopted by the Court.

#### Claim 21

[Preamble] (1) A method for application location register routing (2) by a signal transfer point in a telecommunications network, (3) comprising the steps of:

In the preamble, is "application location register (ALR) routing" a claim limitation?

Alcatel proposes: yes, the preamble recites claim limitations because it is necessary to give life and meaning to the claim, and it introduces terms which the claim later refers to in elements [21a], [21c] and [21d] ("the signal transfer pont") and elements [21c] and [21d] ("application location register routing database").

Tekelec proposes: no, ALR routing in the preamble is not a claim limitation because the body of the claim fully and intrinsically sets forth the complete invention, and the preamble merely states a purpose or intended use.

The Court is of the opinion that the preamble does more than merely state a purpose or intended use. Applying the same reasoning that the Court applied to the preamble for claims 1 and 13, the Court finds that the preamble is a part of claim 21.

The parties then submit different proposals for how the term "ALR routing" in the preamble should be construed.

Alcatel proposes: routing query messages to multiple home location register (HLRs), short message service (SMSCs), or the like, on a mobile subscriber-by-subscriber basis. ALR routing is not synonymous with generic routing of query messages, which are always subscriber-specific messages such that generic routing is routing of subscriber-specific messages to a network node.

Tekelec proposes (conditionally): routing subscriber-specific messages to a network node. ALR routing is not limited to HLRs or SMSCs, nor is it limited to routing the messages on a subscriber-by-subscriber basis.

Once again the Court looks to the specification for guidance in determining the meaning of this term. The same language in the specification previously referred to, when read along with the preamble and the remainder of the claim, supports the conclusion that "ALR routing" as recited in the preamble means:

"routing query messages to multiple home location registers (HLRs), short message service centers (SMSCs), or the like, on a mobile subscriber-by-subscriber basis. ALR routing is not synonymous with generic routing."

The parties disagree over the meaning of "telecommunications network" found in the preamble.

Alcatel proposes: a wireless telecommunications network that operates locally without wires.

Tekelec proposes (conditionally): wired or wireless telecommunications network.

The first element of claim 21 when read in view of the specification supports a finding that the telecommunications network referred to is a wireless network. The Court, therefore, adopts Alcatel's proposal.

# Claim Element 21a

At a signal transfer point, receiving an SS7 query message requesting for a network address of a network node having data related to a specific mobile telecommunications customer; (4)

Alcatel proposes: SS7 query message seeking the network address of a node, such as an HLR, SMSC, or the like, that stores information on a mobile subscriber-by-subscriber basis.

Tekelec proposes: The query message is related to a specific subscriber, but there is no indication of how the query message is subsequently routed or stored (be it on a range basis or a subscriber-by-subscriber basis).

The plain wording of the claim element when read in view of the specification supports Alcatel's proposal and the Court, therefore, construes the term as Alcatel proposes.

# **Claim Element 21b**

- Decoding at least a portion of the SS7 query message (5) and obtaining a translation type (6) and an address maintained in a predetermined data field;
- Alcatel proposes: decoding part or all of the SS7 message alone or in connection with something else
- Tekelec proposes: decoding part or all of the query message
- The plain wording of the claim supports Tekelec's proposal and the Court, therefore, construes the term as proposed by Tekelec.
- "Translation Type:" This term is construed the same as it was construed by the Court in claim element lb.

## **Claim Element 21c**

- Looking up the translation type in a global title translation database (7) residing in the signal transfer point and determining a location of an application location register routing database (8) residing in the signal transfer point for processing the query message
- The parties disagree over the meaning of "global title translation database."
- Alcatel proposes: a lookup table or database that lists the database identifier or location of the ALR routing database. There is no requirement that only translation type is looked up. The GTT database is a different element from the ALR routing database.
- Tekelec proposes: a database in which, using only a translation type, the location of the ALR database can be determined.
- Based on the wording of the claim element when read in view of the specification the Court construes the claim element to mean:
- "a database that lists the database identifier or location of the ALR routing database."
- The parties also disagree over the meaning of "ALR routing database."
- Alcatel proposes: one or more tables or databases that match IMSI or MSISDN numbers corresponding to a specific mobile telecommunications subscription to the network address of the specific HLR, SMSC, or any other service associated with the mobile telecommunications subscription, when the wireless service provider requires the use of multiple HLRs, multiple SMSCs, or the like.
- Tekelec proposes: a database in which a predetermined portion of the global title address is used to obtain a network address of a destination for processing the query message.
- This claim element when read in light of the specification leads the Court to the conclusion that this term should be construed as follows:
- a database or databases that match IMSI or MSISDN numbers corresponding to a specific mobile

telecommunications subscription to the network address of the specific HLR, SMSC, or any other service associated with the mobile telecommunications subscription, when the wireless service provider requires the use of multiple HLRs, multiple SMSCs, or the like.

## Claim Element 21d

Looking up in the application location register routing database residing in the signal transfer point and obtaining the network address; (9) and

The parties have agreed, and the Court agrees, that "obtaining the network address" should be construed to mean:

"a network address is obtained by looking up this information in the application location register routing database."

The Court adopts this construction.

#### Claim Element 21e

Routing the query message to a network node specified by the network address

The parties have agreed, and the Court agrees, that "routing the query message to a network node specified by the network address" should be construed to mean:

"the query message is routed to the network node specified by the network address. The network address may be a particular HLR or SMSC," and the Court adopts this construction.

## Claim 22

The method, as set forth in claim 21, wherein the global title translation database lookup step further comprises the step of looking up in the global title translation database the location of a processor residing in the signal transfer point having access to the application location register routing database.

The parties disagree on the meaning of "looking ... the location of a processor."

Alcatel proposes: the translation type is looked up in a global title translation database to determine a location of a processor residing in the STP having access to the second database. There is no requirement that only translation type is looked up.

Tekelec proposes: using only a translation type, the location of a processor can be determined, the processor residing in the signal transfer point and the processor having access to the second database.

Based on the plain wording of the claim, the Court construes this term to mean:

"the translation type is looked up in a global title translation database to determine a location of a processor residing in the STP having access to the second database."

The method, as set forth in claim 22, further comprising the step of routing the query message to the processor in response to the location obtained from the global title translation database.

The parties have agreed, and the Court agrees, that "routing the query message to the processor" means:

"the query message is routed to the processor in response to the location obtained from the GTT database,"

and the Court adopts this construction.

# Claim 24

The method, as set forth in claim 21, wherein the query message forwarding step comprises the step of forwarding the query message to a home location register specified by the network address.

The parties have agreed, and the Court agrees, that "forwarding the query message to a home location register" means:

"the query message is forwarded to a HLR specified by the network address,"

and the Court adopts this construction.

## Claim 25

The method, as set forth in claim 21, wherein the query message forwarding step comprises the step of forwarding the query message to a short message service center specified by the network address.

The parties have agreed, and the Court agrees, that "forwarding the query message to a short message service center" means:

"the query message is forwarded to a SMSC specified by the network address,"

and the Court adopts this construction.

## Claim 26

The method, as set forth in claim 21, where the decoding step comprises the step of decoding the global title address in the SCCP called party address of the query message.

The parties have agreed, and the Court agrees, that "decoding the global title address in the SCCP called party address of the query message" means:

"the global title address in the SCCP called party address of the query message is decoded,"

and the Court adopts this construction.

## U.S. PATENT NO. 6,097,960

The '960 Patent was issued from a continuation of the application of the '098 Patent. The specifications are

identical for both patents.

The parties agree that the construction for the elements of the claims in the '960 Patent should be the same as the construction for elements of the claims of the '098 Patent with the exception that Tekelec proposes that they be the same with the modification that they are to be construed as not being limited to operations that are necessarily performed in a signal transfer point or within a wireless telecommunications network.

Where patents have a common ancestry and share a common written description, identical terms in the patents should be construed to have the same meaning. Adtox, Inc. v. Exectron Corp., 131 F.3d 1009, 1010 (Fed.Cir.1997). *See also* Atmel Corp. v. Information Storage Devices, Inc., 997 F.Supp. 1210 (N.D.Cal.1998); FMT, Inc. v. Yieldup Intern. Corp., 92 F.Supp.2d 359 (D.Del.2000). The Court has concluded therefore that identical terms in the '098 Patent and the '960 Patent will be construed to have the same meaning.

IT IS SO ORDERED.

E.D.Tex.,2002. Alcatel USA, Inc. v. Tekelec, Inc.

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