United States District Court,
S.D. California.

LUCENT TECHNOLOGIES, INC,
Plaintiff.
v.
GATEWAY, INC and Gateway Country Stores LLC; and, Microsoft Corporation; and, Dell, Inc,
Defendants.

Civil Nos. 02CV2060-B(LAB); 03CV0699-B(LAB); 03CV1108-B(LAB)

April 14, 2004.

David A. Hahn, Attorney at Law, San Diego, CA, Edward Charles Donovan, Gregory F. Corbett, Karen Michelle Robinson, Kirkland and Ellis, Washington, DC, Elizabeth T. Bernard, James E. Marina, John M. Desmarais, Jeanne M. Heffernan, Jonas Reale McDavit, Jordan N. Malz, Michael P. Stadnick, Paul A. Bondor, Robert A. Appleby, Kirkland and Ellis, New York, NY, Eric D. Hayes, Kirkland and Ellis, Chicago, IL, Kenneth H. Bridges, Kirkland and Ellis, San Francisco, CA, for Plaintiff.

Joseph A. Micallef, Scott M. Border, John L. Newby, Arnold and Porter, Washington, DC, Ryan M. Nishimoto, Arnold & Porter LLP, Los Angeles, CA, for Defendants.

ORDER CONSTRUING CLAIMS FOR UNITED STATES PATENT NUMBER 5,627,938

RUDI M. BREWSTER**, District Judge.**

Before the Court is the matter of claims construction for U.S. Patent Number 5,627,938 ("the Johnston "8 Patent") in the above titled cases for patent infringement. FN1 Pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), the Court conducted a Markman hearing regarding construction of the disputed claim terms for the Johnston ' 938 Patent on March 23-25, 2004. Plaintiff Lucent Technologies, Inc. ("Lucent") was represented by the Kirkland & Ellis law firm, Defendant Gateway Inc. ("Gateway") was represented by the Dewey Ballantine law firm, Defendant Microsoft Corporation ("Microsoft") was represented by the law firm of Fish and Richardson and Defendant Dell, Inc. ("Dell") was represented by the Arnold and Porter law firm. FN2

The purpose of the Markman hearing was for the Court, with the assistance of the parties, to prepare jury instructions interpreting the pertinent claims for all claim terms at issue in the Johnston "8 Patent. Additionally, the Court and the parties prepared a "case glossary" for terms found in the claims and the specification for the Johnston "8 Patent, considered to be technical in nature and which a jury of laypersons would not understand clearly without specific definition. As the case advances, the parties may request additional terms to be added to the glossary as to further facilitate the jury's understanding of the disputed claims.

After careful consideration of the parties' arguments and the applicable statues and case law, the Court **HEREBY CONSTRUES** all claim terms in dispute in the Johnston "8 Patent and **ISSUES** the relevant jury instructions as written in exhibit A, attached hereto. Further, the Court **HEREBY DEFINES** all pertinent technical terms as written in exhibit B, attached hereto.

IT IS SO ORDERED.

EXHIBIT A-Johnston "8 Patent

VERBATIM CLAIM LANGUAGE	***COURT'S CLAIM CONSTRUCTION***
Claim 1	
A method of coding an audio signal comprising:	A method of coding an **audio signal** [sound signal] comprising:
(a) converting a time domain representation of the audio signal into a frequency domain representation of the audio signal, the frequency domain representation comprising a set of frequency coefficients;	(a) converting a **time domain representation of the audio signal** [representation of the audio signal over time] into a **frequency domain representation of the audio signal** [representation of the audio signal in terms of the frequencies contained within the signal], the frequency domain representation comprising a set of **frequency coefficients** [the components of a sound signal that, together with their corresponding frequencies, characterize the signal];
(b) calculating a masking threshold based upon the set of frequency coefficients;	(b) calculating **a masking threshold** [an estimate of the maximum amount of noise that can be added to a sound signal before the noise can be heard] based upon the set of frequency coefficients;
(c) using a rate loop processor in an iterative fashion to determine a set of quantization step size coefficients for use in encoding the set of frequency coefficients, said set of quantization step size coefficients determined by using the masking threshold and an absolute hearing threshold; and	(c) using a **rate loop processor** [hardware or hardware plus software, capable of looping to meet the required bit rate for a given application] in an **iterative fashion** [to repeat a set of instructions a specified number of times or until a specific result is achieved] to determine a set of **quantization** [the process of assigning a specific value chosen from a limited number of levels or steps] step size coefficients for use in encoding the set of frequency coefficients, said set of quantization step size coefficients determined by using the masking threshold and **an absolute hearing threshold** [an estimate of the quietest sounds that a human can hear]; and
(d) coding the set of frequency coefficients based upon the set of quantization step size coefficients.	(d) coding the set of frequency coefficients based upon the set of quantization step size coefficients.
Claim 2	
The method of claim 1 wherein the set of frequency coefficients are MDCT coefficients.	The method of claim 1 wherein the set of frequency coefficients are **MDCT coefficients** [frequency coefficients resulting from using the modified discrete cosine transform method for converting sound signals from the time domain to the frequency domain].
Claim 3	
The method of claim 1 wherein the using the rate loop processor in the iterative fashion is discontinued when a cost,	The method of claim 1 wherein the using the rate loop processor in the iterative fashion is discontinued when a cost, measured by the number of bits necessary to code the set of frequency coefficients, is within a predetermined range.

measured by the number of bits necessary to code the set of frequency coefficients, is within a predetermined range.	
Claim 4	
A decoder for decoding a set of frequency coefficients representing an audio signal, the decoder comprising:	A decoder for decoding a set of **frequency coefficients** [the components of a sound signal that, together with their corresponding frequencies, characterize the signal] representing an audio signal, the decoder comprising:
(a) means for receiving the set of coefficients, the set of frequency coefficients having been encoded by:	**Function:** receiving the set of coefficients
	Structure: (as described in the specification at Col. 23:59-Col. 24:1), a digital signal processor (DSP), a DSP with software, VLSI hardware embodiments, or hybrid DSP/VLSI embodiments.
(1) converting a time domain representation of the audio signal into a frequency domain representation of the audio signal comprising the set of frequency coefficients;	(1) converting a time domain representation of the **audio signal** [representation of the audio signal over time] into a **frequency domain representation of the audio signal** [representation of the audio signal in terms of the frequencies contained within the signal] comprising the set of frequency coefficients;
(2) calculating a masking threshold based upon the set of frequency coefficients;	(2) calculating **a masking threshold** [an estimate of the maximum amount of noise that can be added to a sound signal before the noise can be heard] based upon the set of frequency coefficients;
(3) using a rate loop processor in an iterative fashion to determine a set of quantization step size coefficients needed to encode the set of frequency coefficients, said set of quantization step size coefficients determined by using the masking threshold and an absolute hearing threshold; and	(3) using a **rate loop processor** [hardware or hardware plus software, capable of looping to meet the required bit rate for a given application] in an **iterative fashion** [to repeat a set of instructions a specified number of times or until a specific result is achieved] to determine a set of **quantization** [the process of assigning a specific value chosen from a limited number of levels or steps] step size coefficients needed to encode the set of frequency coefficients, said set of Quantization step size coefficients determined by using the masking threshold and **an absolute hearing threshold** [an estimate of the quietest sounds that a human can hear]; and
(4) coding the set of frequency coefficients based upon the set of quantization step size coefficients; and	(4) coding the set of frequency coefficients based upon the set of quantization step size coefficients; and
(b) means for converting the set of coefficients to a time domain signal.	**Function:** converting the set of coefficients to a time domain signal. **Structure:** (as described in the specification at Col. 23:59-Col. 24:1), a digital signal processor (DSP), a DSP with software, VLSI hardware embodiments, or hybrid DSP/VLSI embodiments.

Audio Signal-a sound signal

Time domain representation of the audio signal-representation of the audio signal over time

Frequency domain representation of the audio signal-representation of the audio signal in terms of the frequencies contained within the signal

Frequency Coefficients-the components of a sound signal that, together with their corresponding frequencies, characterize the signal

Masking Threshold-an estimate of the maximum amount of noise that can be added to a sound signal before the noise can be heard

Rate Loop Processor-hardware or hardware plus software, capable of looping to meet the required bit rate for a given application

Iterative Fashion-to repeat a set of instructions a specified number of times or until a specific result is achieved

Quantization-the process of assigning a specific value chosen from a limited number of levels or steps

Absolute Hearing Threshold-an estimate of the quietest sounds that a human can hear

MDCT Coefficients-frequency coefficients resulting from using the modified discrete cosine transform method for converting sound signals from the time domain to the frequency domain

FN1. Lucent originally filed two separate patent infringement actions, one against Defendant Gateway (02CV2060), and a second against Defendant Dell (03CV1108). Microsoft intervened in the action filed by Lucent against Gateway. Microsoft also filed a declaratory judgment action against Lucent (03CV0699) and Lucent filed counterclaims for patent infringement against Microsoft in that action. On July 7, 2003, the Court entered an order consolidating these three cases. There are a total of 15 different patents involved in these three cases collectively.

FN2. The Johnston "8 Patent is not asserted against Defendant Dell and/or Gateway. Nevertheless, those parties were represented by counsel during the Markman hearing of this patent.

S.D.Cal.,2004.
Lucent Technologies, Inc. v. Gateway, Inc.