

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)

**Aug. 21, 2006.**

### **ORDER CONSTRUING CLAIMS FOR UNITED STATES PATENT NUMBER RE 39,080**

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

Before the Court is the matter of claims construction for U.S. Patent Number RE 39,080 ("the Johnston '080 Reissue Patent") in the above titled cases for patent infringement. FN1 Pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996), the Court conducted an initial Markman hearing regarding construction of the disputed claim terms for U.S. Patent Number 5,627,938 ("the Johnston '8 Patent") on March 23-25, 2004. At that time the Court was informed that the Johnston '938 Patent was in the process of being reissued by the Patent and Trademark Office. The Johnston '938 Patent was finally reissued as the Johnston '080 Reissue Patent on April 25, 2006. There were no changes in the claims or specification of the '080 Reissue Patent. The Court held an additional Markman hearing on August 17, 2006 to determine what effect the additional prosecution history of the '080 Reissue Patent might have on the Court's previous claim construction. Plaintiff Lucent Technologies, Inc. ("Lucent") was represented by the Kirkland & Ellis law firm and Defendant Microsoft Corporation ("Microsoft") was represented by the law firm of Fish and Richardson.

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.

Through these Markman hearings the Court, with the assistance of the parties, prepared jury instructions interpreting the pertinent language for all claim terms at issue in the Johnston '080 Reissue Patent. Additionally, the Court and the parties prepared a "case glossary" for terms found in the claims and the specification for the Johnston '080 Reissue Patent, considered to be technical in nature and which a jury of laypersons would not understand clearly without specific definition.

After careful consideration of the parties' arguments and the applicable statutes and case law, the Court **HEREBY CONSTRUES** all claim terms in dispute in the Johnston '080 Reissue 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 '080 Reissue Patent*

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

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.	<i>iterative fashion</i> is discontinued when a cost, measured by the number of bits necessary to code the set of <i>frequency coefficients</i> , is within a predetermined range.
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<b>Claim 4</b>	
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A decoder for decoding a set of frequency coefficients representing an audio signal, the decoder comprising:	A decoder for decoding a set of <i>frequency coefficients</i> representing an <i>audio signal</i> , the decoder comprising:
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(a) means for receiving the set of coefficients, the set of frequency coefficients having been encoded by:	<b>Function:</b> receiving the set of coefficients
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	<b>Structure:</b> (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.
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(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 <i>time domain representation of the audio signal</i> [ <i>representation of the audio signal over time</i> ] into a <i>frequency domain representation of the audio signal</i> [ <i>representation of the audio signal in terms of the frequencies contained within the signal</i> ] comprising the set of <i>frequency coefficients</i> ;
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(2) calculating a masking threshold based upon the set of frequency coefficients;	(2) calculating a <i>masking threshold</i> based upon the set of <i>frequency coefficients</i> ;
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(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 <i>rate loop processor</i> in an <i>iterative fashion</i> to determine a set of <i>quantization</i> step size coefficients needed to encode the set of <i>frequency coefficients</i> , said set of <i>quantization</i> step size coefficients determined by using the <i>masking threshold</i> and <i>an absolute hearing threshold</i> ; and
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(4) coding the set of frequency coefficients based upon the set of quantization step size coefficients; and	(4) coding the set of <i>frequency coefficients</i> based upon the set of <i>quantization</i> step size coefficients; and
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(b) means for converting the set of coefficients to a time domain signal.	<b>Function:</b> converting the set of coefficients to a time domain signal.
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**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.

*EXHIBIT B-Johnston '080 Reissue Patent*

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

**Audio Signal**-a sound signal

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

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

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

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

**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

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

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

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

S.D.Cal.,2006.

Lucent Technologies, Inc. v. Gateway, Inc.

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