UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC., Petitioner

v.

ZENTIAN LIMITED, Patent Owner

Inter Partes Review Case No. IPR2023-00033 U.S. Patent No. 7,587,319

DECLARATION OF CHRISTOPHER SCHMANDT IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 7,587,319

DOCKET

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		c)	Claim 46(b): "a plurality of lexical memories containing in combination complete lexical data for word recognition, each lexical memory	
		d)	containing part of said complete lexical data;" Claim 46(c): "a plurality of processors connected in parallel to said input buffer for processing the	
		e)	speech parameters in parallel," Claim 46(d): "said processors being arranged in groups of processors, each group of processors	/0
		f)	being connected to a lexical memory;" Claim 46(e): "a control processor controlling each processor to process said speech parameters using partial lexical data read from a respective said lexical memory; and"	
		g)	Claim 46(f): "a results memory storing the results of the processing of the speech parameters from said processors."	
	2.	Claim	<i>50</i>	
		a)	Claim 50: "A speech recognition circuit according to claim 46, wherein each processor compares the processed speech parameters with the lexical data in a corresponding lexical memory to identify words as a word recognition event and sends information identifying the identified words to said results memory as the processing results."	
	3.	<i>Claim</i> a)	Claim 67: "A speech recognition circuit according to claim 46, wherein said lexical memories store said lexical data as Hidden Markov Models, and each processor performs the Viterbi search algorithm using a respective part of said lexical	
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		2.	 structure, each lexical tree data structure comprises a model of words having common prefix components, and an initial component of each lexical tree data structure is unique."	95
		3.	<i>Claim 49</i>	
			a) Claim 49: "A speech recognition circuit according to claim 48, wherein each lexical memory stores said lexical tree data structure as a mono phone model of words, and said lexical tree processors use said mono phone models to generate context dependant phone models of words dynamically for use in processing the speech parameters."	97
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		1.	 Dependent Claim 53	
		2.	a) Claim 58: "A speech recognition circuit according to claim 46, wherein said processors determine and output scores in the processing results during the processing of said speech parameters."	03
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the processing results at a word recognition event	
by a said processor."	
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