## IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS WACO DIVISION

PARKERVISION, INC.,

Plaintiff,

v.

TCL INDUSTRIES HOLDINGS CO., LTD., TCL ELECTRONICS HOLDINGS LTD., SHENZHEN TCL NEW TECHNOLOGY CO., LTD., TCL KING ELECTRICAL APPLIANCES (HUIZHOU) CO., LTD., TCL MOKA INT'L LTD., and TCL MOKA MANUFACTURING S.A. DE C.V.,

Defendants.

Case No. 6:20-cv-00945-ADA

JURY TRIAL DEMANDED

## JOINT CLAIM CONSTRUCTION STATEMENT

In accordance with the Scheduling Orders entered in the above-captioned actions (DI 31 in Case No. 6:20-cv-00870 and DI 32 in Case No. 6:20-cv-00945), Plaintiff ParkerVision, Inc. and Defendants TCL Industries Holdings Co., Ltd., TCL Electronics Holdings Ltd., Shenzhen TCL New Technology Co., Ltd., TCL King Electrical Appliances (Huizhou) Co., Ltd., TCL Moka Int'l Ltd., and Moka Manufacturing S.A. De C.V. (collectively "TCL") submit this Joint Claim Construction Statement. This Statement identifies the disputed constructions for claim terms found in U.S. patent nos. 6,049,706 ('706 patent); 6,266,518 ('518 patent); 6,580,902 ('902 patent); 7,110,444 ('444 patent); 7,292,835 ('835 patent); 8,588,725 ('725 patent); 8,660,513 ('513 patent); 9,118,528 ('528 patent); 9,246,736 ('736 patent) and 9,444,673 ('673 patent).



### I. AGREED CONSTRUCTIONS

The parties agree that "the [] switch is coupled to the [] storage element at a node and coupled to a reference potential" ('474 patent, claim 1) should mean: "Plain and ordinary meaning, wherein 'coupled' is 'directly connected through a conductor (or a closed switch).""

## II. DISPUTED CLAIM CONSTRUCTIONS

Claim Term	Proposed for Construction by	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Patent(s); Claims(s)
"low impedance load"	TCL	Plain and ordinary meaning	Indefinite	'736 patent, claims 26, 27; '673 patent, claim 5
"said energy discharged from said capacitor provides sufficient power to drive the low impedance load"	TCL	Plain and ordinary meaning	Indefinite	'673 patent, claim 5
"Storage" terms	ParkerVision	Energy storage element / storage element: "an element of an energy transfer system that stores nonnegligible amounts of energy from an input electromagnetic signal for driving a low impedance load."  Energy storage module / storage module is a module of an energy transfer	"an apparatus that stores non-negligible amounts of energy from the carrier signal."  (all terms are indefinite under ParkerVision's proposed constructions)	'706 claims 105, 114, 115, 164, 166, 168, 175, 179, 186, 190; '902 claim 1; '444 claim 3; '835 claims 1, 18, 20; '725 claims 1, 6, 17, 18, 19; '513 claim 19; '528 claims 1, 9; '736 claims 1, 11, 21, 26, 27; '673 claims 13, 17, 18

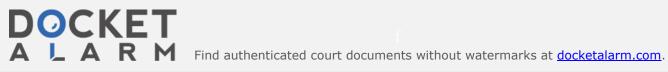


		system that stores nonnegligible amounts of energy from an input electromagnetic signal for driving a low impedance load."  Energy storage device: "a device of an energy transfer system that stores nonnegligible amounts of energy from an input electromagnetic signal for driving a low impedance load."		
"voltage of the input modulated carrier signal is not reproduced or approximated at the capacitor during the apertures or outside of the apertures"	TCL	Plain and ordinary meaning	Indefinite	'673 patent, claim 2
"a down-convert and delay module to under-sample an input signal to produce an input sample of a down- converted image of said input signal, and to delay said input sample"	TCL	Not subject to 35 U.S.C. § 112, ¶ 6 Plain and ordinary meaning	Subject to 35 U.S.C. § 112, ¶ 6.  Function: "undersample an input signal according to a control signal to produce an input sample of a downconverted image of said input signal, and to	'706 patent, claims 1, 7



	T		T	
			delay said input	
			sample"	
			Structure: "the	
			down convert and	
			delay module	
			2624 in Fig. 26	
			and described at	
			26:1-27:21 and	
			28:2041, that	
			includes the	
			switches 2650 and	
			2654, and the	
			capacitors 2652	
			and 2656; and	
			equivalents	
			thereof"	
"delay module"	TCL	Not subject to 35	Subject to 35	'706 patent,
	ICL	_	_	_
terms		U.S.C. § 112, ¶ 6.	U.S.C. § 112, ¶ 6.	claims 1, 7, 34,
			T (11	140
			<u>Function</u> : "delay	
		Plain and ordinary	instances of an	
		meaning	output signal /	
			further delay one	
			or more of said	
			delayed and	
			downconverted	
			input samples"	
			Structure:	
			"structure	
			including "first	
			_	
			delay	
			module 2628,"	
			"second delay	
			module 2630"	
			shown in Fig 26,	
			"delay module	
			3204" shown in	
			Fig. 32 and	
			described at 35:1-	
			18; the sample and	
			hold circuit 4501	
			and 4503 in Fig.	
			45 and described	
			at 32:44-33:19; or	
			an analog delay	
			line having a	

			combination of capacitors, inductors and/or resistors described at 35:19-27; or equivalents thereof"	
"said control signal comprises a train of pulses having pulse widths that are established to improve energy transfer from said input signal to said down-converted image"	TCL	Plain and ordinary meaning	Indefinite	'706 patent, claim 2
"means for under- sampling an input signal to produce an input sample of a down-converted image of said input signal"	TCL	Function: undersampling an input signal to produce an input sample of a downconverted image of the input signal and under-sampling the input signal according to a control signal  Structure: switch 2650 in Fig. 26; switch 5308 in Figs. 53A/53A-1; and equivalents thereof	Subject to § 112, ¶ 6.  Function: "undersampling an input signal to produce an input sample of a downconverted image of said input signal and under-sampling the input signal according to a control signal"  Structure: "the switch 2650 and the capacitor 2652 in Fig. 26; the switch 5308 and capacitor 5310 in Figs. 53A/53A-1, and equivalents thereof"	'706 patent, claim 6
"first delaying means for delaying said input sample"	TCL	Function: delaying the input sample of a down-converted	Subject to § 112, ¶ 6.	'706 patent, claim 6



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