

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

PARKERVISION, INC.,  
*Plaintiff*

-v-

INTEL CORPORATION,  
*Defendant*


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W-20-CV-00108-ADA

**CLAIM CONSTRUCTION ORDER**

The Court held a *Markman* hearing on January 26, 2021. During that hearing, the Court provided its final constructions. The Court now enters those claim constructions.

**SIGNED** this 26th day of January, 2021.



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ALAN D ALBRIGHT  
UNITED STATES DISTRICT JUDGE

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's
<p>“universal frequency down-converter (UFD)” (’518 patent, claim 50)</p>	<p>“circuitry that generates a down converted output signal from an input signal”</p>	<p>“A down-converter that down-converts a carrier signal at an aliasing rate (i.e., by sampling at less than or equal to twice the frequency of the carrier signal)”</p>	<p>“circuitry down converted from an input wide range frequencies”</p>
<p>“energy transfer module” (’902 patent, claim 1)</p>	<p>Plain and ordinary meaning</p>	<p>“A module that down-converts an electromagnetic signal by transferring energy at an aliasing rate (i.e., by sampling at less than or equal to twice the frequency of the electromagnetic signal)”</p>	<p>Plain-and-</p>
<p>“frequency down-conversion module” (’444 patent, claims 2, 3; ’474 patent, claim 1)</p>	<p>Plain and ordinary meaning</p>	<p>“A module that down-converts an input signal at an aliasing rate (i.e., by sampling at less than or equal to twice the frequency of the input signal)”</p>	<p>Plain-and-</p>
<p>“aliasing module” (’725 patent, claim 1)</p>	<p>Plain and ordinary meaning</p>	<p>“A module that down-converts an RF information signal at an aliasing rate (i.e., by sampling at less than or equal to twice the frequency of the RF information signal)”</p>	<p>Plain-and-</p>

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's
<p>“system for frequency down-converting”  ('513 patent, claim 19; '528 patent, claim 1; '736 patent, claim 1)</p>	<p>Plain and ordinary meaning</p>	<p>“A system that down-converts a modulated carrier signal at an aliasing rate (i.e., by sampling at less than or equal to twice the frequency of the modulated carrier signal)”</p>	<p>Preamble and-ordina</p>
<p>“frequency down-conversion module”  ('673 patent, claim 1)</p>	<p>Plain and ordinary meaning</p>	<p>“A module that down-converts an input modulated carrier signal at an aliasing rate (i.e., by sampling at less than or equal to twice the frequency of the input modulated carrier signal)”</p>	<p>Plain-and-</p>
<p>“apparatus for down-converting”  ('673 patent, claim 13)</p>	<p>Plain and ordinary meaning</p>	<p>“An apparatus that down-converts a modulated carrier signal at an aliasing rate (i.e., by sampling at less than or equal to twice the frequency of the modulated carrier signal)”</p>	<p>Preamble and-ordina</p>
<p>“under-samples”  ('444 patent, claim 2; '474 patent, claim 6)</p>	<p>“sampling at an aliasing rate” or “sampling at less than or equal to twice the frequency of the input signal”</p>	<p>“samples at less than or equal to twice the frequency of the input signal using negligible apertures (i.e., pulse widths) that tend towards zero time in duration”</p>	<p>“sampling to twice th input signa</p>

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's
<p>“the [] switch is coupled to the [] storage element at a [] node and coupled to a [] reference potential” (’474 patent, claim 1)</p>	<p>Plain and ordinary meaning</p>	<p>“the switch receives current from a storage element via a node, and shunts (i.e., diverts) current to a point held at a constant reference voltage”</p>	<p>Plain-and-wherein “connected through a closed swi</p>
<p>[wherein said storage elements comprises] “a capacitor that reduces a DC offset voltage in said first-down converted signal and said second down-converted signal” (’444 patent, claim 4)</p>	<p>Plain and ordinary meaning</p>	<p>[wherein said storage elements comprises] “a capacitor that reduces a DC offset voltage in both said first down-converted signal and said second down-converted signal”</p>	<p>Plain-and-wherein th each of the reduces a the corres converted</p>
<p>“DC offset voltage” (’444 patent, claim 4)</p>	<p>“a deviation of DC voltage from a reference voltage”</p>	<p>“a DC voltage level that is added to a signal of interest by related circuitry”</p>	<p>Plain-and-wherein th meaning is between th signal and e.g., groun</p>
<p>“energy storage element” (’513 patent, claim 19; ’528 patent, claim 1; ’736 patent, claims 1, 11, 21)</p>	<p>“an element of an energy transfer system that stores non-negligible amounts of energy from an input electromagnetic signal for driving a low impedance load”</p>	<p>“an element that stores non-negligible amounts of energy from an input electromagnetic (EM) signal”</p>	<p>“an element transfer sy negligible from an in signal”</p>

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's
"energy storage device" ( '673 patent, claim 13)	"a device of an energy transfer system that stores non-negligible amounts of energy from an input electromagnetic signal for driving a low impedance load"	"a device that stores a non-negligible amount of energy from an input electromagnetic (EM) signal"	"a device of an energy transfer system that stores non-negligible amounts of energy from an input electromagnetic signal"
"energy storage module" ( '902 patent, claim 1)	"a module of an energy transfer system that stores non-negligible amounts of energy from an input electromagnetic signal for driving a low impedance load"	"a module that stores a non-negligible amount of energy from an input electromagnetic (EM) signal"	"a module of an energy transfer system that stores non-negligible amounts of energy from an input electromagnetic signal"
"storage element" ( '444 patent, claim 3; '474 patent, claim 1)	"an element of an energy transfer system that stores non-negligible amounts of energy from an input electromagnetic signal for driving a low impedance load"	"an element that stores a nonnegligible amount of energy from an input electromagnetic (EM) signal"	"an element of an energy transfer system that stores non-negligible amounts of energy from an input electromagnetic signal"
"storage module" ( '725 patent, claim 1)	"a module of an energy transfer system that stores non-negligible amounts of energy from an input electromagnetic signal for driving a low impedance load"	"a module that stores a non-negligible amount of energy from an input electromagnetic (EM) signal"	"a module of an energy transfer system that stores non-negligible amounts of energy from an input electromagnetic signal"

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