

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

TIGO ENERGY INC.,

Plaintiff,

v.

SMA SOLAR TECHNOLOGY AMERICA
LLC and SMA SOLAR TECHNOLOGY AG,

Defendants.

Civil Action No. 22-915-GBW

ORDER

At Wilmington this 4th day of December 2023:

For the reasons set forth in the Memorandum Opinion issued this day, **IT IS HEREBY ORDERED** that the Court construes the following claim terms of U.S. Patent Nos. 8,823,218 (the “218 Patent”), 8,933,321 (the “321 Patent”), 9,584,021 (the “021 Patent”), 9,966,848 (the “848 Patent”), 10,256,770 (the “770 Patent”), and 10,333,405 (the “405 Patent”) as follows:

<u>Claim Term</u>	<u>Court’s Construction</u>
Disputed Constructions	
a time period longer than a predetermined number of allowed skips ’321 Patent, Claims 1, 12	Plain and ordinary meaning; does not encompass zero skips
a predetermined number of skips ’770 Patent, Claim 14	Plain and ordinary meaning; does not encompass zero skips
skips...less than the predetermined number ’770 Patent, Claim 15	Plain and ordinary meaning; does not encompass zero skips

<u>Claim Term</u>	<u>Court's Construction</u>
“photovoltaic panel” '770 Patent Claims 14-16	Limiting preamble; plain and ordinary meaning, which is “a device that contains at least one solar cell configured to convert photons into electrical energy (synonymous with PV panel, solar panel, and solar module)”
“first stage” '021 Patent, Claim 1	Plain and ordinary meaning, which means “the first set of one or more circuit components that operate alone or together to provide a specified function set forth in the claim”
“second stage” '021 Patent, Claim 1	Plain and ordinary meaning, which means “the second set of one or more circuit components that operate alone or together to provide a specified function set forth in the claim”
convert the first output to a second output '021 Patent, Claim 18	convert the first output, which is received as an input from the first stage power converter, into a second output
generating . . . a second output from the first output '405 Patent, Claim 7	providing, by means of a second stage power converter, a second output, in response to receiving a first output from a first stage power converter
First stage power converter '021 Patent, Claim 10, 18; '848 Patent, Claim 1, 10; '405 Patent, Claim 1, 7, 9	a power converter that is temporally before the second stage power converter
second stage power converter '021 Patent, Claim 10, 18; '848 Patent, Claim 1, 10; '405 Patent, Claim 1, 7, 9	a power converter that is after the first stage power converter, which receives as an input a voltage or current waveform from the first stage power converter
Consume at least a portion of the first output '021 Patent, Claim 1, 10	Plain and ordinary meaning, which is “use up at least some of the first output”
Consume [the/a] portion of the first output '021 Patent, Claims 2, 20	Plain and ordinary meaning, which is “use up at least some of the first output”
Consuming . . . a portion of the output '405 Patent, Claims 7, 10	Plain and ordinary meaning, which is “using up at least some of the first output”

<u>Claim Term</u>	<u>Court's Construction</u>
Consuming the first output '405 Patent, Claim 1	Plain and ordinary meaning, which is "using up the first output"
Not consuming the first output '405 Patent, Claim 1, 9	Plain and ordinary meaning, which is "not using up the first output"
"power absorption circuit" '021 Patent, Claim 18; '848 Patent, Claims 1, 4, 10, 13; '405 Patent, Claim 7	Not indefinite. Plain and ordinary meaning, which is "a circuit that absorbs power"
"switchable load" '021 Patent, Claims 1-4, 10, 20; '848 Patent, Claims 4, 13; '405 Patent, Claims 1, 4, 7, 9, 11	Not indefinite. Plain and ordinary meaning, which is "something that consumes electrical power and can be switched on or off"
"control circuit" '021 Patent, Claims 10, 18, 20; '848 Patent, Claims 1, 10; '405 Patent, Claims 1, 7, 9	Not indefinite. Plain and ordinary meaning, which is "a circuit that provides control"
"configured to block" '405 Patent, Claim 1	Not indefinite. Plain and ordinary meaning, which is "designed to prevent"
Agreed-Upon Constructions	
location controller '321 Patent, Claim 1	local controller
disconnect / disconnects / disconnecting '321 Patent, Claims 1, 5	sever or terminate a connection, or reduce duty cycle / voltage to a safe level
Shutdown '321 Patent, Claim 10	<i>agreed: same meaning as disconnect</i>

<u>Claim Term</u>	<u>Court's Construction</u>
Skips '770 Patent, Claim 12	The event of missing a communication or pulse
Heartbeat signals '770 Patent, Claims 12, 16	Periodic signals
When the anomaly includes a predetermined number of skips of the heartbeat signals '770 Patent, Claim 14	When the anomaly is a predetermined number of skips of the heartbeat signals
Power supply . . . converts power '021 Patent, Claim 1	A power electronics circuit that converts one type or level of a voltage or current waveform to another
Power converter '021 Patent, Claims 10, 18; '848 Patent, Claims 1, 10; '405 Patent, Claims 1, 7, and 9	A power electronics circuit that converts one type or level of a voltage or current waveform to another
First output '021 Patent, Claims 1-3, 10, 18; '848 Patent, Claims 1, 10; '405 Patent, Claims 1, 2, 4, 7-9, 11	Plain and ordinary meaning
Second output '021 Patent, Claims 1-3, 10, 18; '848 Patent, Claims 1, 10; '405 Patent, Claim 1, 2, 4, 7-9, 11	Plain and ordinary meaning
Coupled '021 Patent, Claim 18; '848 Patent, Claim 1	In electrical connection with (direct or indirect)

<u>Claim Term</u>	<u>Court's Construction</u>
Signal(s) '021 Patent, Claims 3-4, 10, 18, 20; '848 Patent, Claims 1, 10; '405 Patent, Claim 1	Electronic communication(s)
signaling '848 Patent, Claim 10; '405 Patent, Claim 9	using an electronic signal to communicate



GREGORY B. WILLIAMS
UNITED STATES DISTRICT JUDGE