

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

BELL SEMICONDUCTOR, LLC,
Plaintiff

-v-

NXP SEMICONDUCTORS, N.V., NXP,
B.V., NXP USA, INC.
Defendant

A-20-CV-00611-ADA

BELL SEMICONDUCTOR, LLC,
PLAINTIFF

-v-

MICROCHIP TECHNOLOGY, INC.,
MICROSEMI CORPORATION
Defendant

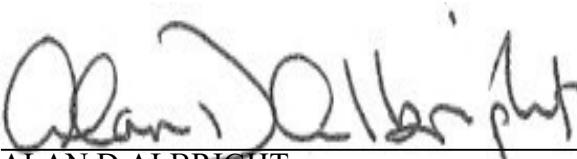
W-20-cv-00296-ADA

CLAIM CONSTRUCTION ORDER

The Court scheduled two *Markman* hearings, on April 1, 2021 and April 16, 2021. The April 1 *Markman* hearing concerned patents that were asserted against both NXP and Microchip while the April 16 *Markman* hearing concerned patents that were asserted against a single Defendant. During the April 1 hearing, the Court provided its final constructions.

With respect to the April 16 hearing, after receiving the Court's preliminary constructions, the parties informed the Court that they did not wish to have an oral hearing and would stand on their briefing. As such, the Court canceled the April 16 hearing and made the preliminary constructions its final constructions. The Court now enters those claim constructions.

SIGNED this 14th day of April, 2021.



ALAN D ALBRIGHT
UNITED STATES DISTRICT JUDGE

Terms for Patents Asserted against Both NXP and Microchip

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Final Construction
<p>"cutout" / "cutouts"</p> <p>('340 Patent, Claims 1, 3, 4, 6, 12, 13, 17, 18; '269 Patent, Claims 1, 3, 4, 6, 7, 10, 11, 13)</p> <p>Proposed by Defendants</p>	<p>No construction necessary, plain and ordinary meaning.</p> <p>In the alternative, to the extent the Court determines that a specific construction is warranted, Bell Semic proposes:</p> <p>"a portion of the conductive layer that has been removed from the layer"</p>	<p>"portion(s) of the overall structure that is (are) formed by the active removal of material that would have otherwise been present but for the express purpose of reducing parasitic capacitance in the structure"</p> <p>and</p> <p>"the absence of metallization in a specific area of a conductive layer"</p>	<p>"the absence¹ of metallization in a specific area of a conductive layer"</p> <p>1 – Note not for the jury: "absence of metallization" does not require a "complete absence of metallization"</p>
<p>"electrically insulating area"</p> <p>('340 Patent, Claims 1, 4; '269 Patent, Claims 1, 4, 10, 11)</p> <p>Proposed by Defendants</p>	<p>No construction necessary, plain and ordinary meaning.</p>	<p>"area devoid of electrically conductive material and devoid of vias"</p>	<p>"an area devoid¹ of an electrical conductor"</p> <p>¹ – Note not for the jury: "devoid" does not require a "complete absence" of an electrical conductor, but said electrical conductor material must be floating</p>

<p>“each electrically insulating area completely overlaps a corresponding one of the contact pads”</p> <p>(’340 Patent, Claim 1; ’269 Patent, Claim 1)</p> <p>“cutouts each of which encloses an electrically insulating area and completely overlaps one of the contact pads”</p> <p>(’340 Patent, Claim 4)</p> <p>“each of the cutouts overlapping a corresponding one of the electrical contacts”</p> <p>(’340 Patent, Claim 12)</p> <p>“each cutout completely overlaps a corresponding one of the electrical contacts”</p> <p>(’340 Patent, Claim 13)</p> <p>“each cutout completely overlaps a corresponding one of the electrical contacts”</p> <p>(’340 Patent, Claim 17)</p>	<p>No construction necessary, plain and ordinary meaning.</p>	<p>“each electrically insulating area completely overlaps only one contact pad”</p> <p>“cutouts each of which encloses an electrically insulating area and completely overlaps only one of the contact pads”</p> <p>“each of the cutouts overlapping only one of the electrical contacts”</p> <p>“each of the cutouts completely overlaps only one of the electrical contacts”</p> <p>“each cutout completely overlaps only one of the electrical contacts”</p>	<p>Plain-and-ordinary meaning.</p>
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Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Final Construction
Proposed by Microchip			
<p>“forming the cutouts to completely overlap corresponding electrical contacts”</p> <p>(’269 Patent, Claim 13)</p> <p>Proposed by Microchip</p>	No construction necessary, plain and ordinary meaning.	“forming the cutouts to completely overlap only one electrical contact”	Plain-and-ordinary meaning.

<p>“[such that] there is substantially no overlap of the rows of [contact pads with metal in the second electrically conductive layer]”</p> <p>(’340 Patent, Claim 1; ’269 Patent, Claim 1)</p> <p>“[such that] there is substantially no overlap of the rows of [contact pads with metal in the third electrically conductive layer]”</p> <p>(’340 Patent, Claim 4; ’269 Patent, Claims 4, 7)</p> <p>“[such that] there is substantially no overlap of the rows of [electrical contacts with metal in the plurality of electrically conductive layers]”</p> <p>(’340 Patent, Claim 12)</p> <p>“[such that] there is substantially no overlap of the rows of [contact pads with metal in the plurality of electrically conductive layers]”</p> <p>(’269 Patent, Claim 10)</p>	<p>“there is a substantial absence of overlap of the rows of [contact pads / electrical contacts] with metal . . .”</p>	<p>Indefinite</p> <p>Alternatively, “such that there is no overlap of the rows of [pads/electrical contacts] with vias in the second/third/plurality of electrically conductive layer(s)”</p>	<p>Not indefinite. Plain-and-ordinary meaning.</p>
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Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Final Construction
Proposed by all parties			
<p>“A method, comprising steps of: forming a first layer including a plurality of rows of electrical contacts”</p> <p>(’269 Patent, Claim 1)</p> <p>“A method, comprising steps of: forming a first electrically conductive layer including a plurality of rows of contact pads”</p> <p>(’269 Patent, Claim 10)</p> <p>Proposed by Microchip</p>	No construction necessary, plain and ordinary meaning.	This first method step in cl. 1/cl. 10 must precede the other method steps.	The method steps may be performed in any order.
<p>“wherein the oxide film is used as an etch stop layer”</p> <p>(’669 Patent, Claim 1)</p> <p>Proposed by Defendants</p>	No construction necessary, plain and ordinary meaning.	“wherein etching of the block dielectric layer stops on the oxide film”	Plain-and-ordinary meaning.

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Final Construction
<p>"low temperature oxide film"</p> <p>('669 Patent, Claim 6)</p> <p>Proposed by Microchip</p>	<p>No construction necessary, plain and ordinary meaning.</p>	<p>Indefinite</p> <p>Alternatively, "an oxide film in the temperature range of 350 to 500 degrees Celsius"</p>	<p>Not indefinite. Plain-and-ordinary meaning.</p>
<p>"making a partial cut in the leadframe"</p> <p>('007 Patent, Claim 1)</p> <p>Proposed by Microchip</p>	<p>No construction necessary, plain and ordinary meaning</p>	<p>"making a cut in the leadframe where the leadframe is not cut through in its thickness direction (nor in any other directions) and the depth of the cut is smaller than the thickness of the leadframe"</p>	<p>"the leadframe is not cut through in its thickness direction"</p>

Terms for Patents Asserted against NXP only

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Final Construction
“method of manufacturing a semiconductor device, comprising” ('129 Patent, Claim 1) [Proposed by Defendant]	Not indefinite Preamble is limiting	Indefinite Alternatively, Preamble is nonlimiting	Not indefinite. Preamble is not limiting.
“nickel/chromium/iron alloy” ('129 Patent, Claim 6) [Proposed by Plaintiff]	“alloy with the three dominant elements being nickel, chromium, and iron”	Plain and ordinary meaning	Plain-and-ordinary meaning.
“metal reinforcing layer formed under and in contact with the wire bonding pad” ('836 Patent, Claim 1) [Proposed by Defendant]	No construction necessary, plain and ordinary meaning.	“reinforcing layer comprised of one or more metals under and in contact with the wire bonding pad”	Plain-and-ordinary meaning.
“brittle inter-level dielectric” ('836 Patent, Claim 1) [Proposed by Defendant]	“low-k dielectric”	“inter-level dielectric that is brittle and not deposited by plasma-enhanced CVD” Alternatively, indefinite	Plain-and-ordinary meaning.

Terms for Patents Asserted against Microchip only

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Final Construction
<p>“region for performing said bumping process” and “probe region for performing a wafer test prior to performing said bumping process”</p> <p>('173 Patent, Claim 9)</p> <p>[Proposed by Defendant]</p>	<p>No construction necessary, plain and ordinary meaning.</p>	<p>§ 112(6), means-plus-function</p> <p>Functions: (1) performing said bumping process; and (2) performing a wafer test prior to performing said bumping process, respectively</p> <p>Structure: (1) bumping region defined by passivation opening; and (2) probing region defined by passivation opening, respectively</p>	<p>Not subject to § 112, ¶ 6. Plain-and-ordinary meaning.</p>

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Final Construction
<p>“further comprising forming a Si—Ge layer on the exposed portion of the silicon substrate” / “further comprising”</p> <p>('132 Patent, Claim 5)</p> <p>[Proposed by Defendant]</p>	<p>No construction necessary, plain and ordinary meaning.</p>	<p>further comprising forming a Si—Ge layer on the exposed portion of the silicon substrate, the Si—Ge layer different than the Si—Ge deposited on the silicon substrate</p> <p>Alternatively: plain and ordinary meaning so long as the jury is informed that (1) “depositing Si—Ge” and (2) “forming a Si—Ge layer” are two separate method steps¹</p> <p>Alternatively: “further comprising” means “including the additional step of”</p>	<p>Plain-and-ordinary meaning.</p>