

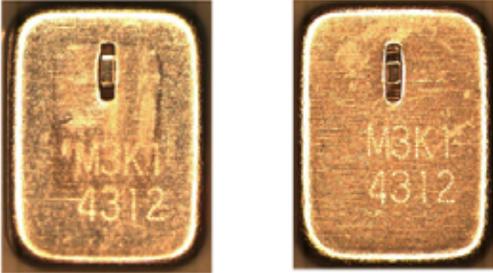
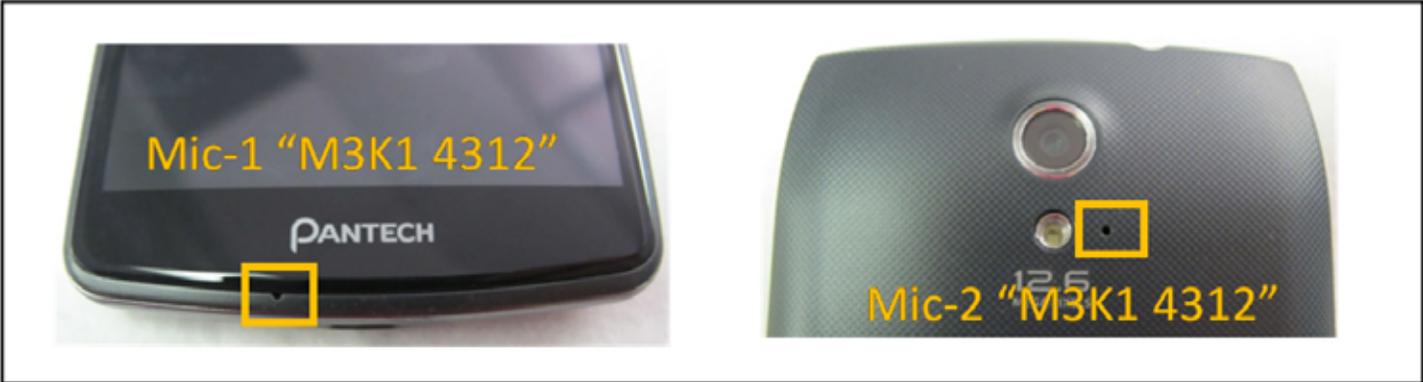
EXHIBIT 29

Claim 1	ACCUSED PRODUCTS¹
1.1 An electronic package comprising:	<p>The Accused Products include an electronic package.</p> <p>For example:</p> <p>The Accused Products include an electronic package (e.g., electronic component(s) covered with an electronic shield). As an example, a teardown of Pantech Discover smartphone reveals at least two electronic components covered with an EMI shield. For example only, two of these components are microphones located at the bottom and on the back cover of the phone respectively. The disassembly of Pantech Discover reveals two MEMS microphone packages: Mic-1 “M3K1 4312” (at the bottom of the device) on a flex board and Mic-2 “M3K1 4312” (on the back cover of the device) on the main board.</p>

¹ The Accused Products include all of the devices listed in the Accused Products Spreadsheet attached to the '551 patent infringement contentions and any other product uncovered during discovery that includes an electronic component surrounded by an EMI shield/Faraday cage.

Claim 1	ACCUSED PRODUCTS ¹
	<div data-bbox="430 280 1068 883" style="border: 1px solid black; padding: 10px; text-align: center;"><p data-bbox="531 824 976 862">Front and back View of device</p></div> <p data-bbox="1081 852 1102 868" style="text-align: right;">2</p>

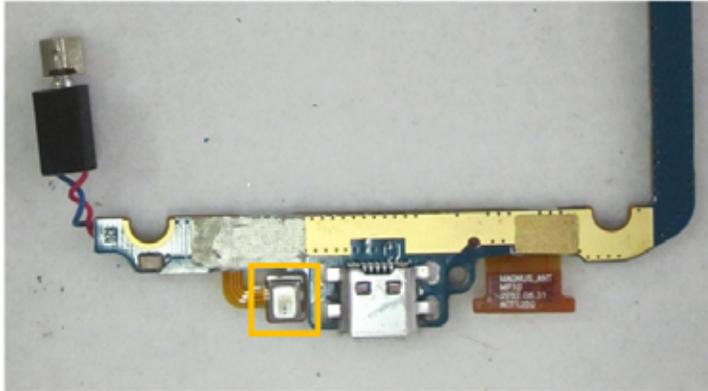
² All photographs herein are for the exemplary purpose of showing infringement by the Accused Products.

Claim 1	ACCUSED PRODUCTS ¹
	<p data-bbox="443 337 1638 375">Optical image of the two electronic components covered with an EMI shield</p> <div data-bbox="764 399 1257 672"></div> <div data-bbox="422 756 1845 1138"></div>

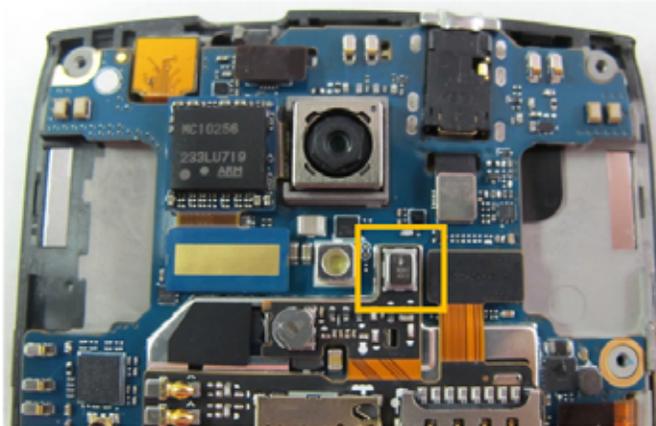
Claim 1	ACCUSED PRODUCTS ¹
	<p data-bbox="478 297 976 332">Front view of device disassembly</p> <p data-bbox="751 345 844 381">Mic-2</p>  <p data-bbox="735 1271 827 1307">Mic-1</p>

Claim 1 **ACCUSED PRODUCTS¹**

Mic-1 MEMS microphone board placement

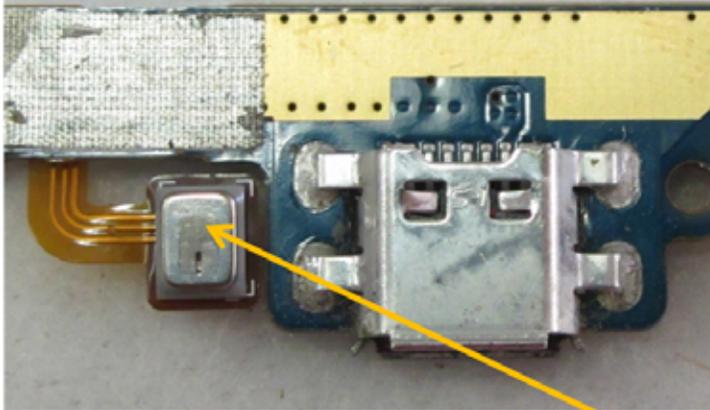


Mic-2 MEMS microphone board placement

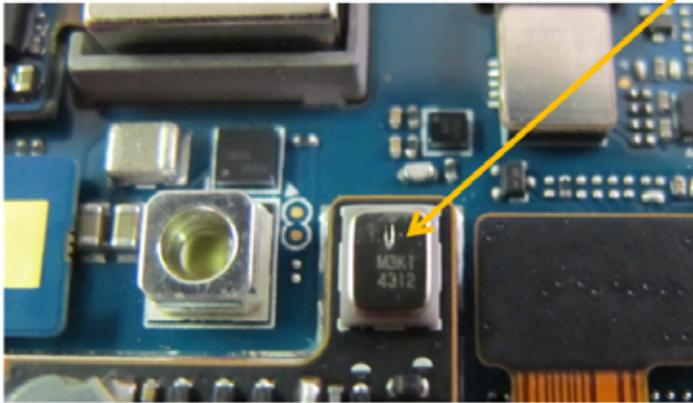


Claim 1 **ACCUSED PRODUCTS¹**

Close up view of Mic-1 "M3K1 4312"

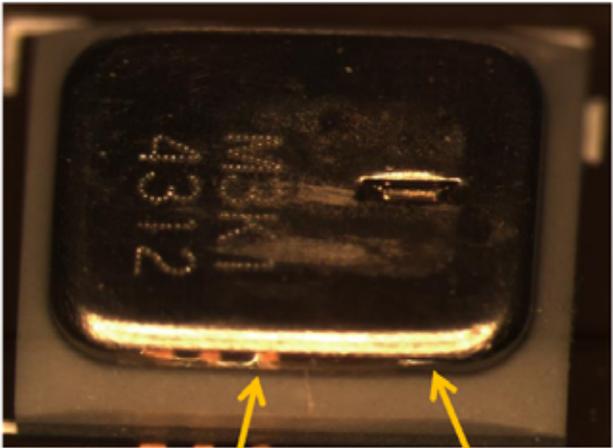


Close up view of Mic-2 "M3K1 4312"

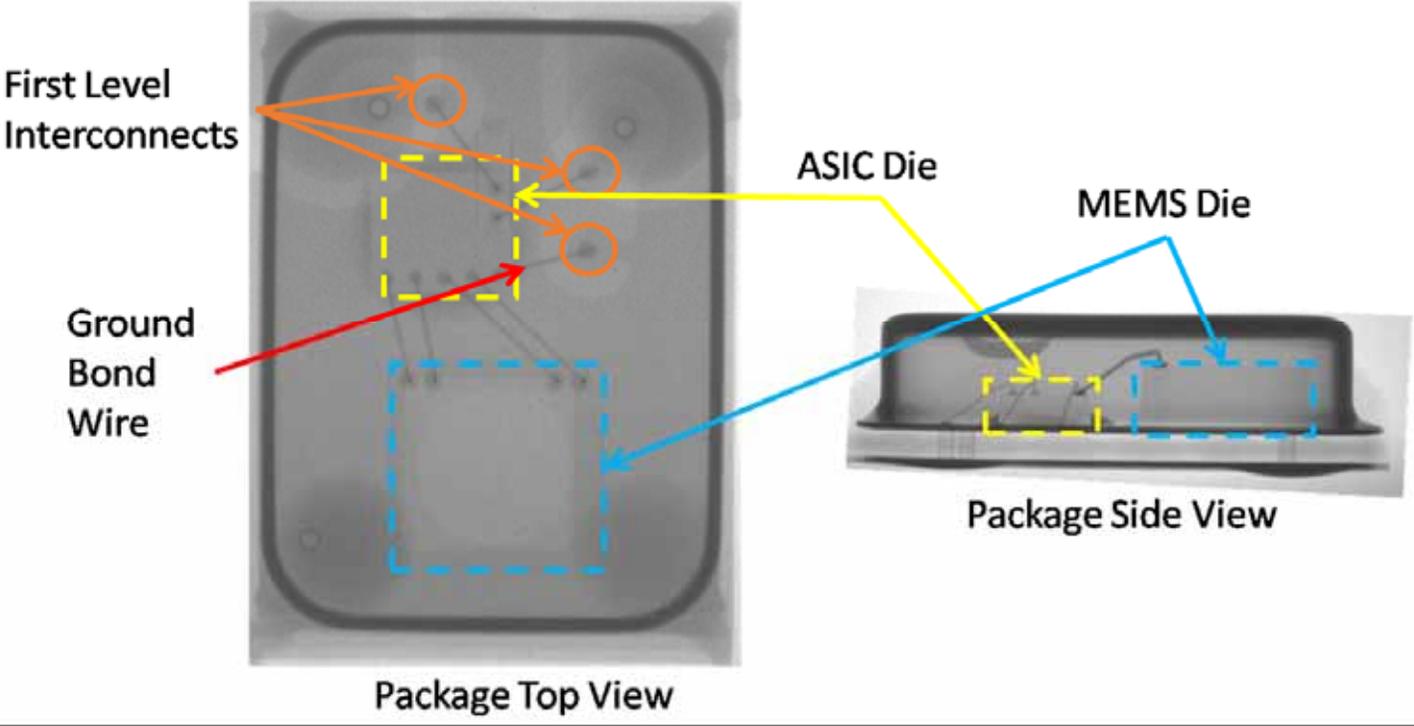


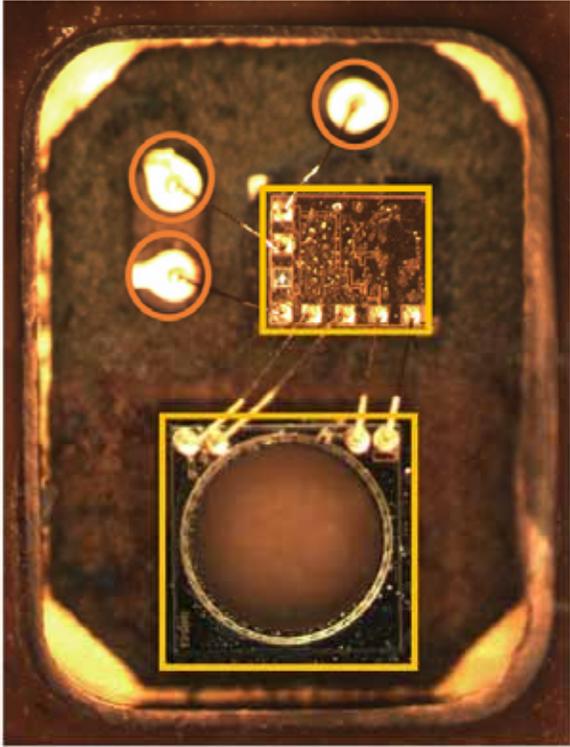
MEMs microphone
package EMI shield

Rockstar reserves the right to add additional information and infringement theories once discovery begins in this case,

Claim 1	ACCUSED PRODUCTS ¹
	<p>particularly once the defendant produces its technical documents and circuit schematics.</p>
<p>1.2 a rigid planar dielectric substrate carrying a ground member extending across substantially the whole area within the confines of the edges of the substrate;</p>	<p>The Accused Products contain a rigid planar dielectric substrate carrying a ground member extending across substantially the whole area within the confines of the edges of the substrate.</p> <p>For example, each of the two electronic components in Pantech Discover comprises a rigid planar dielectric substrate carrying a ground member extending across substantially the whole area of the substrate. The perspective image of the electronic package for Mic-1, for example, shows the rigid planar dielectric substrate and the ground member extending across the area of the substrate.</p> <div data-bbox="422 610 1304 1369" style="border: 1px solid black; padding: 10px;">  <p data-bbox="474 1110 793 1192">Rigid planar dielectric substrate</p> <p data-bbox="701 1224 1276 1354">Ground member extending across substantially the whole area within the confines of the substrate</p> </div>

Claim 1	ACCUSED PRODUCTS ¹
	<p>Rockstar reserves the right to add additional information and infringement theories once discovery begins in this case, particularly once the defendant produces its technical documents and circuit schematics.</p>
<p>1.3 an electronic component mounted upon a first side of the substrate and having terminals connected to a plurality of first level terminal interconnects provided upon the first side of the board;</p>	<p>The Accused Products contain an electronic component mounted upon a first side of the substrate and having terminals connected to a plurality of first level terminal interconnects provided upon the first side of the board.</p> <p>For example, each of the two electronic components in Pantech Discover identified is an electronic component mounted upon the top side of the substrate. The external X-ray images for Mic-1, for example, show the ASIC and the MEMS die of Mic-1.</p>

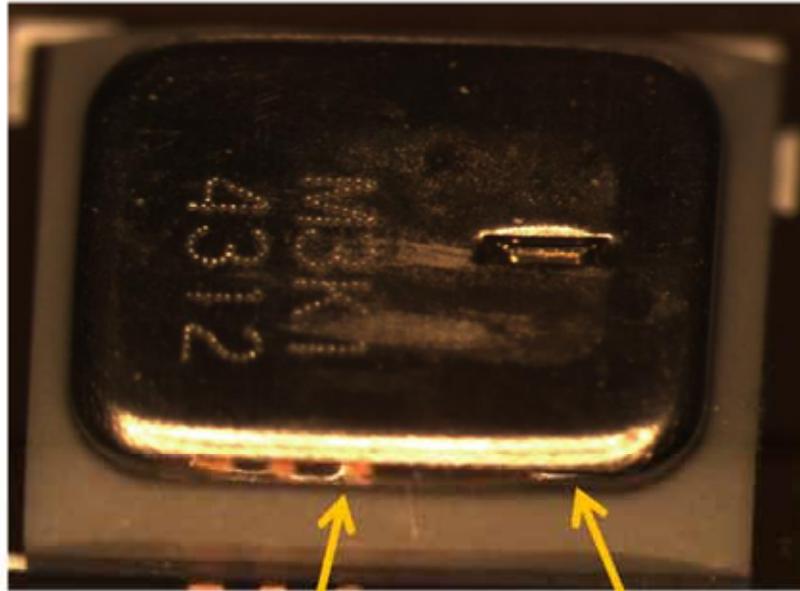
Claim 1	ACCUSED PRODUCTS ¹
	<p data-bbox="835 305 1478 347">External X-ray images of MEMS Mic-1</p>  <p data-bbox="457 428 695 516">First Level Interconnects</p> <p data-bbox="520 667 653 802">Ground Bond Wire</p> <p data-bbox="827 1040 1129 1078">Package Top View</p> <p data-bbox="1251 509 1394 547">ASIC Die</p> <p data-bbox="1528 548 1709 586">MEMS Die</p> <p data-bbox="1419 857 1730 894">Package Side View</p> <p data-bbox="415 1133 2018 1235">High resolution images of the decapsulated package also show terminals of Mic-1 that connect to first level interconnects provided on the substrate. Further delayering of the package reveals the first level interconnects on the top layer that are in turn also connected to circuit paths in the substrate.</p>

Claim 1	ACCUSED PRODUCTS ¹
	<p data-bbox="457 326 1808 375">Terminals of Mic-1 are electrically connected to First Level Interconnects</p>  <p data-bbox="795 427 1365 1174">A scanning electron micrograph (SEM) showing a central square chip (Mic-1) and a larger circular component below it, both mounted on a substrate. The chip and component are connected to a network of interconnects. Three circular pads are visible on the left side of the chip, and several wires connect the chip to the larger component below. The entire assembly is within a rectangular frame.</p>

Claim 1	ACCUSED PRODUCTS ¹
	<p data-bbox="485 332 1388 391">Delayed image of Mic-1 package</p> <p data-bbox="741 435 1268 480">First Level Interconnects</p>  <p data-bbox="892 1057 1045 1105">Layer 1</p> <p data-bbox="415 1203 2018 1271">Rockstar reserves the right to add additional information and infringement theories once discovery begins in this case, particularly once the defendant produces its technical documents and circuit schematics.</p>
1.4 a covering	The Accused Products contain a covering EMI shield extending over the electronic component to locate the electronic

Claim 1

ACCUSED PRODUCTS¹



**Rigid planar
dielectric substrate**

Ground member extending across
substantially the whole area within
the confines of the substrate

A resistance of 1.6 ohms measured between the top of the EMI shield and the bottom side of the substrate indicates that the

Claim 1

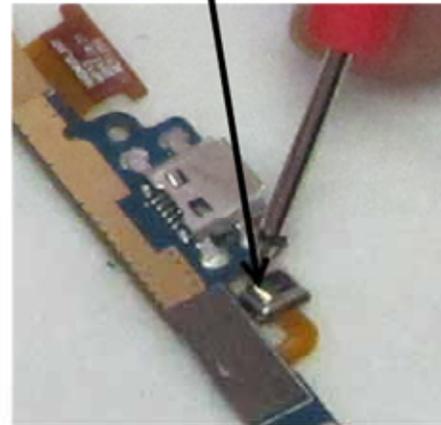
ACCUSED PRODUCTS¹

EMI shield is electrically connected to the ground member.

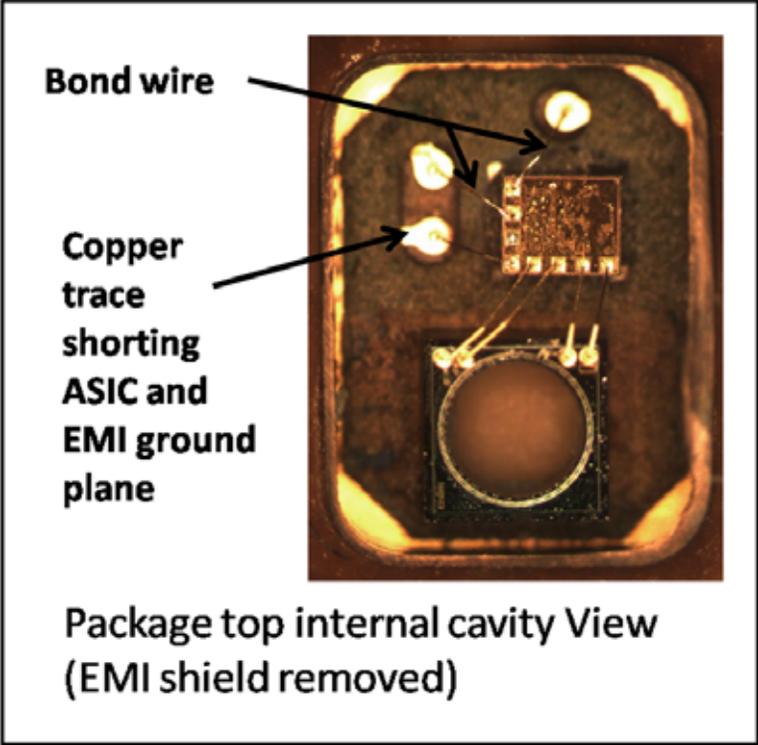
1.6 Ω resistance measured between the EMI shield top surface and chassis ground

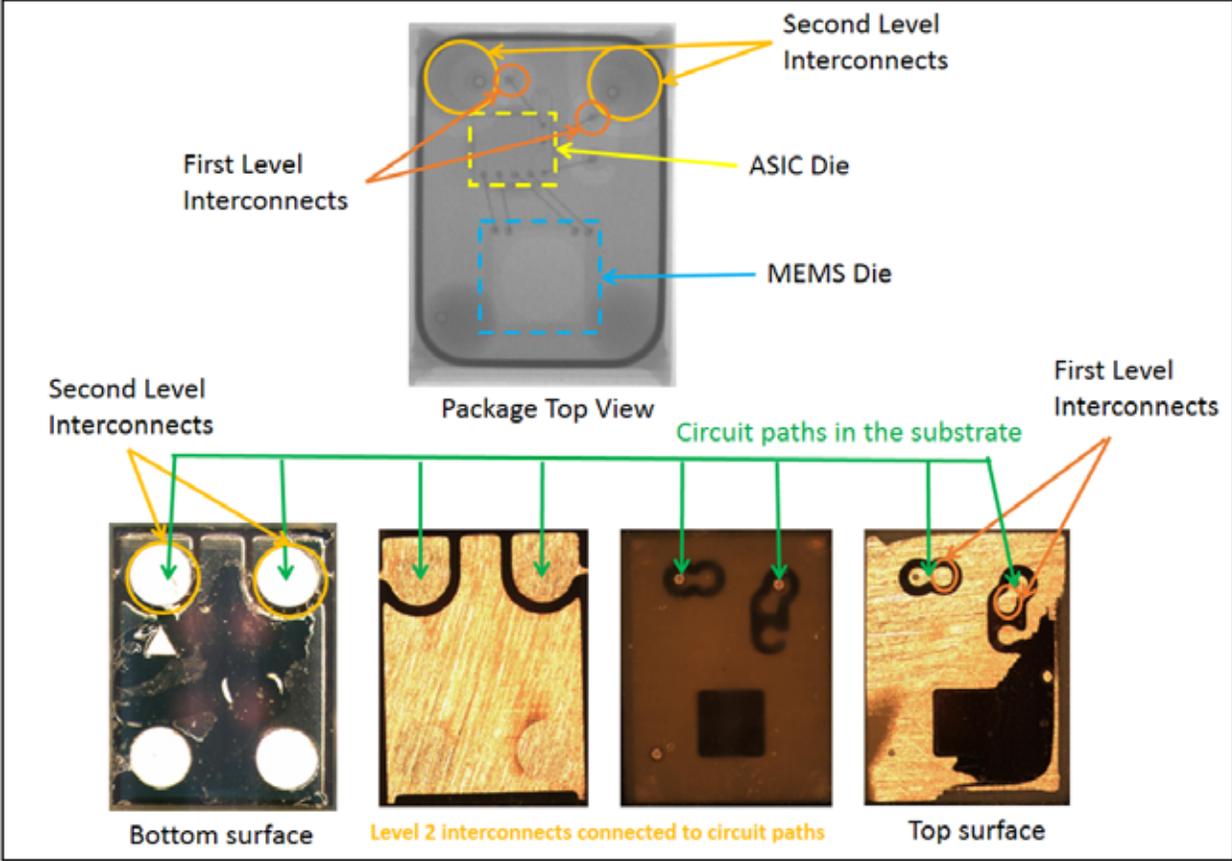


Package EMI shield top



Rockstar reserves the right to add additional information and infringement theories once discovery begins in this case, particularly once the defendant produces its technical documents and circuit schematics.

Claim 1	ACCUSED PRODUCTS ¹
<p>1.5 and a plurality of second level interconnects mounted upon a second side of the substrate and electrically interconnected through circuit paths in the substrate to the first level interconnects.</p>	<p>The Accused Products contain a plurality of second level interconnects mounted upon a second side of the substrate and electrically interconnected through circuit paths in the substrate to the first level interconnects.</p> <p>For example, each of the two electronic components in Pantech Discover identified above has a plurality of second level interconnects mounted upon the second side of the substrate and electrically interconnected through circuit paths in the substrate to the first level interconnects. For example, for Mic-1, the bond wires connect to the first level interconnects which in turn are connected to second level interconnect on layer 2 of the package on the second side of the substrate through circuit paths.</p> <div data-bbox="422 573 1180 1318"><p>Bond wire</p><p>Copper trace shorting ASIC and EMI ground plane</p><p>Package top internal cavity View (EMI shield removed)</p></div>

Claim 1	ACCUSED PRODUCTS ¹
	<p data-bbox="415 282 2020 423"> Delayering of Mic-1 package, as an example, shows a plurality of second level interconnects mounted upon the second side of the substrate (Layer 2) and electrically interconnected through circuit paths in the substrate to the first level interconnects. The two layers between Layer 1 on the top side of the substrate and Layer 2 on the bottom side both contain at least two interconnects at the identical locations as Layer 1 and Layer 2 to enable the circuit paths. </p>  <p data-bbox="415 1338 2020 1369"> Rockstar reserves the right to add additional information and infringement theories once discovery begins in this case, </p>

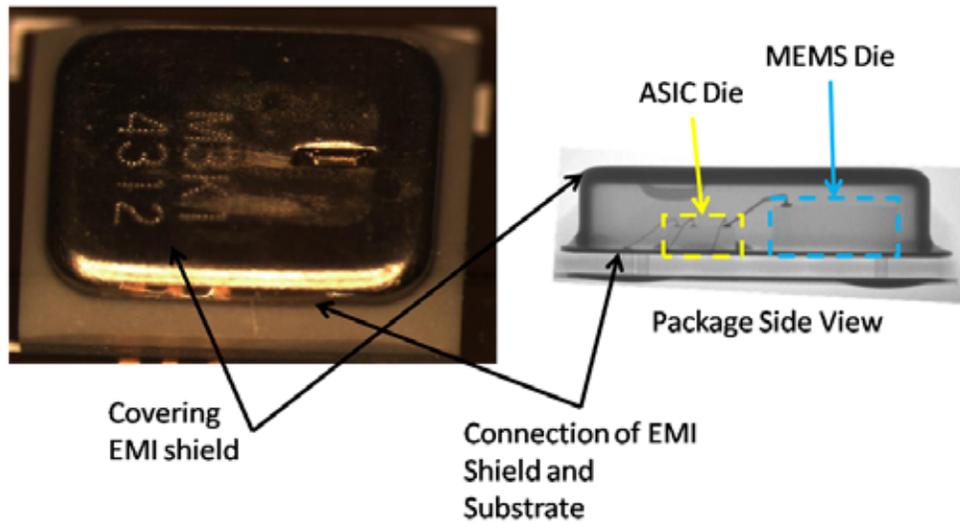
Claim 1	ACCUSED PRODUCTS¹
	particularly once the defendant produces its technical documents and circuit schematics.

Claim 2	ACCUSED PRODUCTS
2. A package according to claim 1 wherein the electronic component comprises an integrated circuit component.	<p>The Accused Products comprise a package according to claim 1 wherein the electronic component comprises an integrated circuit component.</p> <p>For example, the Accused Products, including Pantech Discover identified above, contain one or more microphones that comprise an ASIC Die and a MEMS Die covered by an EMI shield. The ASIC Die is an integrated circuit component manufactured specifically for use in the microphone.</p> <div data-bbox="417 646 1509 1351" data-label="Image"> <p>The image shows two views of a MEMS microphone package. On the left is an 'External X-ray image of MEMS Mic-1' showing a dark, rectangular package with some markings. On the right is a 'Package Side View' showing the internal components: an 'ASIC Die' (yellow dashed box) and a 'MEMS Die' (blue dashed box) mounted on a substrate. A 'Covering EMI shield' is shown as a dark layer over the dies. Arrows indicate the 'Connection of EMI Shield and Substrate' at the bottom of the package.</p> </div>

	<p>Rockstar reserves the right to add additional information and infringement theories once discovery begins in this case, particularly once the defendant produces its technical documents and circuit schematics.</p>
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Claim 3	ACCUSED PRODUCTS
<p>3. A package according to claim 1 comprising two or more electronic components mounted upon the first side of the substrate and at least one of which is an integrated circuit component and all of the components are commonly shielded by the EMI shield.</p>	<p>The Accused Products include a package according to claim 1 comprising two or more electronic components mounted upon the first side of the substrate and at least one of which is an integrated circuit component and all of the components are commonly shielded by the EMI shield.</p> <p>For example, the Accused Products, including Pantech Discover identified above, contain one or more microphones that comprise an ASIC Die and a MEMS Die covered by an EMI shield. The ASIC Die is an integrated circuit component manufactured specifically for use in the microphone.</p>

External X-ray images of MEMS Mic-1



Rockstar reserves the right to add additional information and infringement theories once discovery begins in this case, particularly once the defendant produces its technical documents and circuit schematics.