

# EXHIBIT E

**NXP – INFRINGEMENT CLAIM CHART – U.S. PATENT NO. 8,416,862**

Bell Northern Research (“BNR”) provides evidence of infringement of exemplary claims 1, 2, 3, and 4 of U.S. Patent No. 8,416,862 by the NXP 88W8997 2.4/5 GHz Dual-Band 2x2 Wi-Fi 5 (802.11ac) + Bluetooth 5.3 system-on-chip (“88W8997”) products. The claim charts demonstrate infringement by comparing each element of the asserted claims to corresponding components, as recited in the Accused Products. These claim charts are not intended to constitute an expert report on infringement. These claim charts are provided by way of example, and not by way of limitation.

The information in this chart is exemplary, based only upon information from available resources, and is only intended to illustrate a theory (or theories) of infringement as of the date of service. BNR provides these infringement contentions before obtaining any information from Respondent and/or third parties. BNR expects that Respondent and/or third parties will produce additional information regarding the Respondent’s products which is presently publicly available. Accordingly, BNR reserves the right to supplement this infringement analysis with information available to BNR. Furthermore, BNR reserves the right to revise this infringement analysis, as appropriate, upon issuance of any terms recited in the asserted claims.

The Accused Processes, identified below, are performed using one or more one or more wireless communications devices and methods described below. The Accused Products include NXP products that practice 802.11ac and/or 802.11ax. These include the NXP 88Q9098, 88Q9098S, 88W8801, 88W8887, 88W8897, 88W8897P, 88W8964, 88W8977, 88W8987, 88W8997, 88W8997A, AW690, CW641, IW416, IW612, and IW620 products. One such device, the 88W8997 is charted below.

Unless otherwise noted, BNR contends that NXP and customers of NXP directly infringe under 35 U.S.C. § 271(a) the ’862 Patent claimed below within the United States. In particular, on information and belief, NXP at least infringes § 271(a) via testing and use within the United States and NXP’s customers and their end users infringe § 271(a) by testing and using products containing the apparatus to communicate over wireless networks using the 802.11ac standard or subsequent backwards-compatible standards, which are performed by methods in accordance with the 802.11ac standard as set forth below.

In addition, BNR contends that NXP induces its customers and their end users to infringe pursuant to 35 U.S.C. § 271(b). NXP contributes to infringement by offering to sell within the United States, selling within the United States, and importing into the United States apparatus for use in practicing the ’862 Patented Processes under 35 U.S.C. § 271(c). The Accused Products form a part of a system (lacking only external antennas), and the Accused Processes are especially adapted for use in practicing the ’862 Patent under subsequent backwards-compatible wireless networking standards and are not stable articles of commerce suitable for sale.

Unless otherwise noted, BNR believes and contends that each element of each claim asserted herein is literally met by the Accused Products. However, to the extent that NXP attempts to allege that any asserted claim element is not literally met by the

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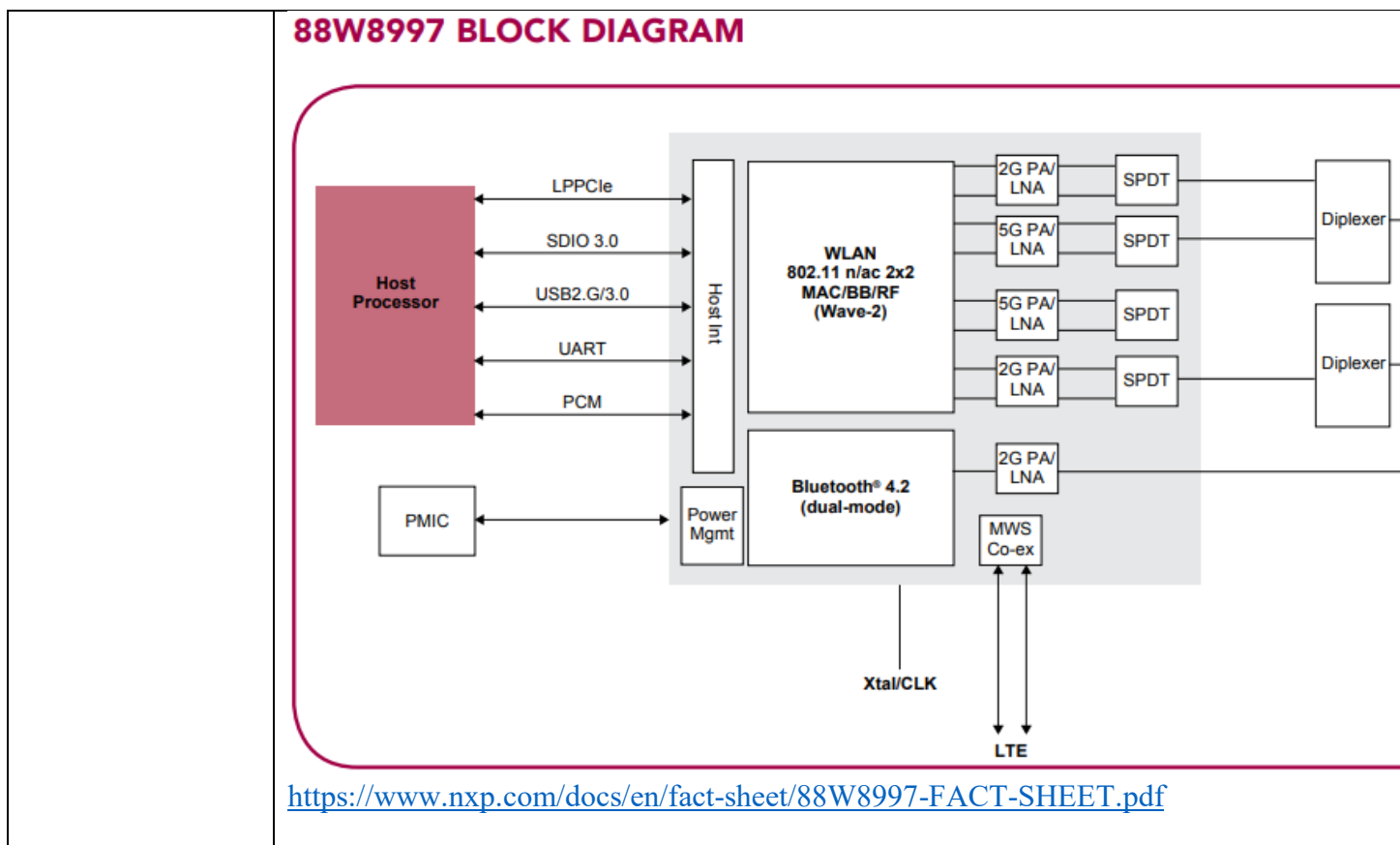
that such elements are met under the doctrine of equivalents. More specifically, in its investigation and analysis of the A identify any substantial differences between the elements of the patent claims and the corresponding features of the A herein. In each instance, the identified step of the Accused Processes is performed by the Accused Products for at least s in substantially the same way to achieve substantially the same result as the corresponding claim element.

To the extent the chart of an asserted claim relies on evidence about certain specifically-identified Accused Products, BN and belief, any similarly-functioning instrumentalities also infringe the charted claims. BNR reserves the right to am based on other products made, used, sold, imported, or offered for sale by NXP. BNR further reserves the right to am by adding, subtracting, or otherwise modifying content in the Exemplary Evidence column of each chart.

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Claim #	Accused Instrumentalities
<p>1. A method for feeding back transmitter beamforming information from a receiving wireless communication device to a transmitting wireless communication device, the method comprising:</p>	<p>Upon information and belief, NXP is the direct infringer practicing the claim recited here NXP 88W8997 device that provides for feeding back transmitter beamforming information to a receiving wireless communication device to a transmitting wireless communication device, and is compliant with the 802.11ac standard (IEEE Std. 802.11-2016).</p> <p><b>PRODUCT OVERVIEW</b></p> <p>The NXP 88W8997 SoC is the industry's first 28 nm, 802.11ac (Wave-2), 2 x 2 MU-MIMO combo solution with support for Bluetooth 5.1. The design enhancements and the low-power 28 nm process technology reduce the power consumption by up to 40% over existing solutions. This SoC features the highest level of integration in the market, including dual-band power amplifiers (PAs), low-noise amplifiers (LNAs) and switches, reducing the board-level bill of materials to the bare minimum and enabling easy chip-on-board and module design for board markets.</p>

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