

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

KONINKLIJKE KPN N.V.,

Plaintiff,

v.

U-BLOX AG and U-BLOX AMERICA,
INC.,

Defendants.

C.A. No. 21-cv-46-LPS

JURY TRIAL DEMANDED

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

This is an action for patent infringement in which Plaintiff Koninklijke KPN N.V. (“KPN”) makes the following allegations against u-blox AG and u-blox America, Inc. (collectively, “u-blox”). This action is related to those actions currently pending before this Court in C.A. Nos. 17-cv-83, 17-cv-85, 21-cv-41, 21-cv-43, 21-cv-44, and 21-cv-45, including actions filed contemporaneously against Acer Inc., Acer America Corporation, Bullitt Group Ltd., Bullitt Mobile Ltd., Coolpad Technologies Inc., Xiaomi Corporation, Xiaomi Communications Co., Ltd., and Xiaomi Inc.

BACKGROUND

1. KPN’s extensive research and development efforts have led to hundreds of issued patents in the United States and across the world, which KPN has licensed to many leading global telecommunications companies, including many of u-blox’s mobile technology competitors.

2. Specifically, KPN has made its patents available for license both through bilateral negotiations and through joint licensing or patent pool licensing arrangements, including through agreements with at least Sipro, Sisvel, and Via Licensing.

3. Further, prior to filing suit, KPN provided u-blox with notice of United States Patent Nos. 6,212,662 and 8,886,772 (collectively, the “Asserted Patents”). Despite these efforts, u-blox has not obtained a license or any other rights to either Asserted Patent. KPN thus files this suit to protect its valuable intellectual property rights.

PARTIES

4. Plaintiff Koninklijke KPN N.V. is a telecommunications (including fixed, mobile, television, and internet) and ICT solution provider headquartered at Wilhelminakade 123, NL-3072 AP, The Netherlands.

5. Defendant u-blox AG is a corporation organized and existing under the laws of Switzerland with a principal place of business at Zürcherstrasse 68, 8800 Thalwil Switzerland.

6. Defendant u-blox America, Inc. is a corporation organized and existing under the laws of Delaware.

JURISDICTION AND VENUE

7. This action arises under the patent laws of the United States, Title 35 of the United States Code.

8. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

9. This Court has personal jurisdiction over each u-blox defendant because, directly or through intermediaries, each has committed acts within Delaware giving rise to this action

and/or has established minimum contacts with Delaware such that the exercise of jurisdiction would not offend traditional notions of fair play and substantial justice.

10. For example, during the infringing time period, each u-blox defendant placed one or more infringing products into the stream of commerce via an established distribution channel with the knowledge and/or understanding that such products were being offered for sale and/or sold to customers in the United States, including in this District.

11. For example, u-blox America, Inc. is a corporation organized and existing under the laws of Delaware.

12. Further, beginning in 2012 and continuing through 2016, u-blox AG sought and obtained FCC approval to sell LISA-U2 modules in the United States. <https://fcc.report/FCC-ID/XPYLISAU200/>.

13. Further, u-blox AG subsequently sold such products in or to the United States, including to and/or through u-blox America, Inc.

14. For the reasons set forth above, venue is proper under 28 U.S.C. § 1391(b) and (c) and 28 U.S.C. § 1400.

THE ASSERTED PATENTS

15. This lawsuit asserts causes of action for infringement of United States Patent Nos. 6,212,662 and 8,886,772.

16. United States Patent Nos. 6,212,662 and 8,886,772 previously were the subject of litigation in *Koninklijke KPN N.V., v. Samsung Electronics Co., Ltd.*, Civil Action Nos. 2:14-cv-1165 and 2:15-cv-948 (E.D. Tex.). The court in that matter construed each patent. As stated at D.I. 315 in 2:14-cv-1165, Samsung subsequently entered into a settlement and license agreement with KPN.

17. U.S. Patent No. 6,212,662 also was and is currently the subject of litigation before the Court in C.A. Nos. 17-cv-82, -83, -84, -85, -86, -87, -88, -89, -90, -91, and -92. On September 29, 2020, the Court issued a claim construction order in which it construed the following terms of U.S. Patent No. 6,212,662:

Claim Term	Court's Construction
A device for producing error checking based on original data provided in blocks with each block having plural bits in a particular ordered sequence / producing error checking	The portion of the preamble reciting "original data provided in blocks with each block having plural bits in a particular ordered sequence" is limiting. The preamble otherwise is non-limiting and does not require construction.
generating device configured to generate check data	Not means-plus-function A device configured to generate supplementary data for use in checking for errors
check data	supplementary data for use in checking for transmission errors
modify the permutation in time	change the permutation from time to time

18. Each Asserted Patent also has been affirmed to be valid.

19. For example, in *Koninklijke KPN N.V. v. Gemalto M2M GmbH*, Case Nos. 2018-1863, 2018-1864, 2018-1865 (Fed. Cir. 2019), the Federal Circuit held that Claims 2-4 of U.S. Patent No. 6,212,662 satisfied 35 U.S.C. § 101 as a matter of law.

20. In IPR2018-00320, the United States Patent and Trademark Office Patent Trial and Appeal Board issued a Final Written Decision finding that, even under a preponderance of the evidence standard, Claims 2-4 of U.S. Patent No. 6,212,662 were valid and patentable.

21. Consistent with this ruling, in IPR2018-00551, IPR2018-00553, IPR2018-00554, and IPR2018-00757, the United States Patent and Trademark Office Patent Trial and Appeal Board declined to institute *inter partes* review of U.S. Patent No. 6,212,662—finding “no reasonable likelihood” that Claims 2-4 were invalid or nonpatentable.

22. Similarly, in IPR2016-00808, the United States Patent and Trademark Office Patent Trial and Appeal Board declined to institute *inter partes* review of U.S. Patent No. 8,886,772—finding “no reasonable likelihood” that any claim was invalid or nonpatentable.

NOTICE

23. Each u-blox defendant has been provided notice of its infringement and has been invited to take a license to the Asserted Patents, but has declined to do so.

24. For example, KPN wrote to u-blox by at least December 23, 2015, to notify u-blox that it needed to obtain a license to various KPN patents. Further, KPN offered to provide u-blox that license. KPN included with that letter two claim charts demonstrating how u-blox’s LTE and UMTS products infringed U.S. Patent No. 6,212,662.

25. KPN concluded its letter by stating that “the products of u-blox complying with UMTS and/or LTE ... infringe directly and/or indirectly” and that KPN was prepared to offer u-blox a license for such infringing products.

26. After sending this information, KPN continued to communicate and negotiate with u-blox regarding its need to license U.S. Patent No. 6,212,662.

27. Further, by at least April 23, 2021, KPN had informed u-blox of U.S. Patent No. 8,886,772—identifying it as relevant to u-blox’s home gateway management products.

28. Despite these and other efforts, u-blox never obtained a license or other rights to U.S. Patent Nos. 6,212,662 or 8,886,772, and its infringing products remain unlicensed to this day.

COUNT 1 INFRINGEMENT OF U.S. PATENT NO. 6,212,662

29. KPN repeats and incorporates by reference each preceding paragraph as if fully set forth herein and further state:

30. On April 3, 2001, the U.S. Patent and Trademark Office duly and legally issued U.S. Patent No. 6,212,662, which is entitled, “Method and Devices for the Transmission of Data With the Transmission Error Checking.” A true and correct copy of U.S. Patent No. 6,212,662 is attached as Exhibit A.

31. KPN is the owner by assignment of U.S. Patent No. 6,212,662 and holds all rights, title, and interest to it, including the sole right to sue and recover for any and all infringements.

32. Following the issue of U.S. Patent No. 6,212,662, KPN submitted a declaration to ETSI stating, “[t]o the extent that [U.S. Patent No. 6,212,662] ... [is] or become[s], and remain[s] ESSENTIAL ..., the Declarant and/or its AFFILIATES are (1) prepared to grant irrevocable licenses under this[] IPR[] on terms and conditions which are in accordance with Clause 6.1 of the ETSI IPR Policy; and (2) will comply with Clause 6.1 bis of the ETSI IPR Policy.”

33. On information and belief, each u-blox defendant denies that any claim of U.S. Patent No. 6,212,662 is ESSENTIAL IPR to any ETSI standard.

34. On information and belief, each u-blox defendant denies that any claim of U.S. Patent No. 6,212,662 ever has been ESSENTIAL IPR to any ETSI standard.

35. The devices claimed in U.S. Patent No. 6,212,662 have proved to be of great importance to the field of error detection and correction. Consistent with this importance, U.S. Patent No. 6,212,662 has been licensed extensively by many of Defendants’ mobile technology competitors.

36. Each u-blox defendant directly infringed U.S. Patent No. 6,212,662 in violation of 35 U.S.C. § 271(a) by making, using, selling, and/or offering for sale in the United States, and/or

importing into the United States, prior to June 26, 2016, and without authorization, one or more products that practice Claims 2-4 of U.S. Patent No. 6,212,662 literally or under the doctrine of equivalents (hereafter “’662 Accused Products”). At a minimum, such ’662 Accused Products include all smartphones and other mobile telecommunication devices configured to send or receive data over an LTE, UMTS, or cdma2000 radio telecommunication network using or incorporating the error checking technology described in Exhibit A. This includes products like the following: the u-blox Lisa-U2 series, Toby-L2 series, Toby-R2 series, MPCI-L2 series, EVK L2 series, Lara-R2 Series, Sara-U2 series, C027 Series with LISA cellular module, C16 Series Telematics Application Board with LISA cellular module, EVK-U2x, EVK-U26/27 with SARA-U2, EVK-U20//U23, EVK-L20/EVK-L22 Cellular Evaluation Kit, ADP-L200, and ADP-L210.

37. As detailed below, the u-blox Lisa-U2 series meets every element of Claims 2-4 of U.S. Patent No. 6,212,662 literally or under the doctrine of equivalents.¹ Further, the identified components and functionality of the u-blox Lisa-U2 series are representative of the components and functionality present in all ’662 Accused Products.

38. Claim 1 of U.S. Patent No. 6,212,662 recites a device configured to enable checking for errors in data, including in transmitted data, by generating check data from data provided in blocks comprised of plural bits received in a particular ordered sequence. The device further includes at least one varying device configured to vary this original data, including through its incorporation of an interleaver or other permutating device configured to reorder at least some of the bits of the original data input to it without reordering any of the blocks of original data it receives, prior to supplying it to at least one generating device. The device further

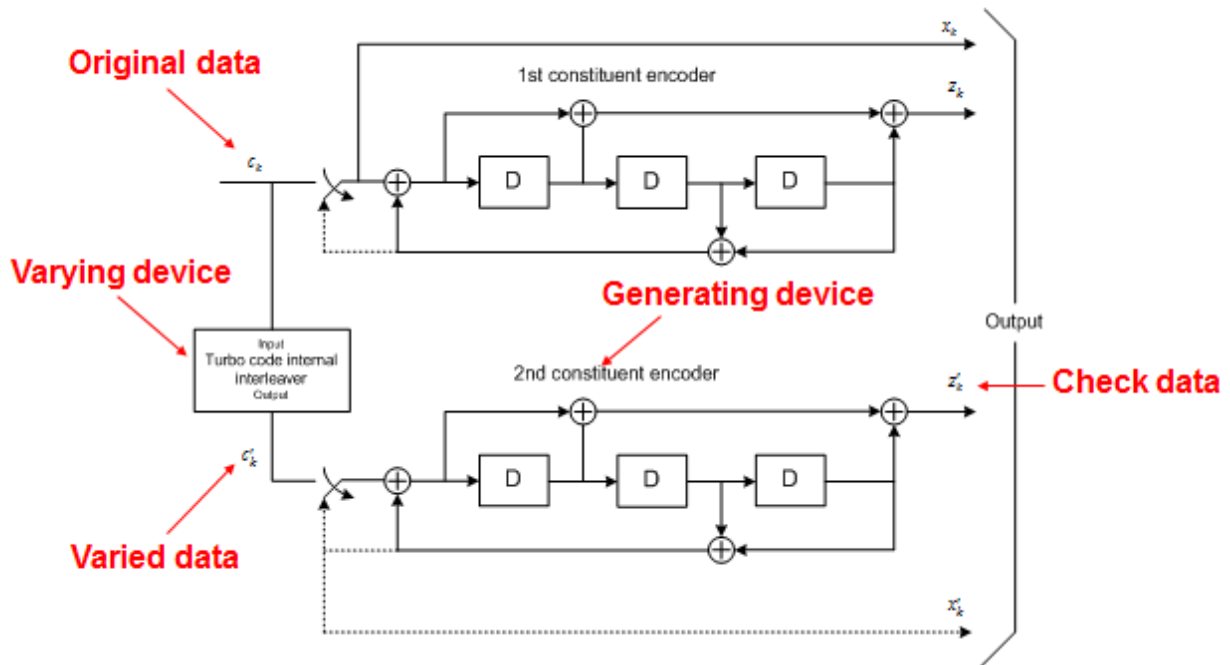
¹ This description is illustrative and not intended to be an exhaustive or limiting explanation of every manner in which each ’662 Accused Product infringes the U.S. Patent No. 6,212,662.

includes at least one generating device configured to generate supplementary data (check data) from the data it receives from the at least one permutating device.

39. On information and belief, the u-blox Lisa-U2 series is a device configured to receive data in the form of blocks comprised of plural bits in a particular ordered sequence and to use such data to generate data that can be used to check for errors in transmitted data.

40. Further, on information and belief, the u-blox Lisa-U2 series include a varying device configured to vary the original data it receives, including through its incorporation of an interleaver configured to reorder the bit position of at least some of the bits of the original data provided to it without reordering any of the blocks of that original data, prior to supplying that now varied data to at least one generating device.

41. Further, on information and belief, the u-blox Lisa-U2 series further includes at least one device configured to generate supplementary data for use in error checking (i.e., check data), including but not limited to through its use of one or more encoders. Below is a representative depiction of such infringing components and functions:



42. Further, on information and belief, the u-blox Lisa-U2 series includes at least one varying device, including, for example, an interleaver, configured to change from time to time the manner in which it reorders at least some of the data bits it receives as disclosed in Claim 2 of U.S. Patent No. 6,212,662.

43. On information and belief, the u-blox Lisa-U2 series further includes at least one varying device, including, for example, an interleaver, configured to change the manner in which it reorders at least some of the bits it receives based on the characteristics of the data it receives as disclosed in Claim 3 of U.S. Patent No. 6,212,662.

44. On information and belief, the u-blox Lisa-U2 series further includes at least one permutating device, including, for example, an interleaver, that includes or makes use of data storage in which subsequent re-orderings of the members of the given set are stored as disclosed in Claim 4 of U.S. Patent No. 6,212,662.

45. On information and belief, each u-blox defendant thus directly infringed each element of Claims 2-4 of U.S. Patent No. 6,212,662 by selling and offering to sell in the United States, and by importing into the United States, without authorization, '662 Accused Products like the u-blox Lisa-U2 series.

46. In addition, each u-blox defendant indirectly infringed U.S. Patent No. 6,212,662 in violation of 35 U.S.C. § 271(b) by taking active steps to encourage and facilitate direct infringement by third parties prior to June 26, 2016, including partners, service providers, manufacturers, importers, resellers, customers, and/or end users, in this District and elsewhere in the United States, through the dissemination of the '662 Accused Products and the creation and dissemination of promotional and marketing materials, supporting materials, instructions, product manuals, and/or technical information relating to such products with knowledge and the specific intent that its efforts will result in the direct infringement of U.S. Patent No. 6,212,662.

47. For example, on information and belief, prior to June 26, 2016, each u-blox defendant took active steps to encourage various distributors and re-sellers to sell and offer for sale the u-blox Lisa-U2 series despite knowing of U.S. Patent No. 6,212,662 and the fact that such sales and offers for sale would infringe each element of at least Claims 2-4 of U.S. Patent No. 6,212,662.

48. Such active steps include, for example, advertising and marketing the u-blox Lisa-U2 series as capable of transmitting data using a radio telecommunication network, obtaining FCC approval for such device to be utilized in the United States, and distributing such devices to consumers and resellers knowing that they would be marketed and offered for sale in the United States.

49. Prior to June 26, 2016, each u-blox defendant also took active steps to encourage end users of the u-blox Lisa-U2 series to use such products in the United States in a manner it knew would directly infringe each element of at least Claims 2-4 of U.S. Patent No. 6,212,662 as described above, including by encouraging users to utilize the u-blox Lisa-U2 series to transmit data despite knowing of U.S. Patent No. 6,212,662 and the fact that such data transmissions would cause such end user to use such products in a manner that infringes U.S. Patent No. 6,212,662.

50. Such active steps include, for example, advertising and marketing the u-blox Lisa-U2 series as a device capable of transmitting data using a radio telecommunication network and instructing users how to utilize such device to transmit data in a manner that would infringe U.S. Patent No. 6,212,662. *See, e.g.*, Exhibit B (stating that “LISA-U2 modules are ideal for consumer/industrial applications requiring high-speed data transmission, and machine-to-machine applications” and “are the perfect choice for mobile internet terminals, tablets, in-car infotainment, connected navigation systems, security and surveillance systems, eCall, fleet management, metering, anti-theft systems, and other automotive applications” and providing detailed technical specifications to encourage such use).

51. In short, each u-blox defendant actively induced the direct infringement of U.S. Patent No. 6,212,662 by resellers and end users by distributing at least the u-blox Lisa-U2 series and, among other things, marketing its use and capabilities and publishing manuals and promotional literature describing and instructing how to use it in an infringing manner.

52. Further, each u-blox defendant took such active steps after receiving the above described notice of U.S. Patent No. 6,212,662 and its infringement of it.

53. In addition, each u-blox defendant has indirectly infringed and continues to indirectly infringe U.S. Patent No. 6,212,662 in violation 35 U.S.C. § 271(c) by selling or offering to sell in the United States, or importing into the United States, prior to June 26, 2016, the '662 Accused Products with knowledge that they are especially designed or adapted to operate in a manner that infringes U.S. Patent No. 6,212,662 and despite the fact that the infringing technology or aspects of each '662 Accused Products are not a staple article of commerce suitable for substantial non-infringing use.

54. In addition, each u-blox defendant's infringement of U.S. Patent No. 6,212,662 was willful. At least by December 23, 2015, KPN had provided each u-blox defendant with notice of U.S. Patent No. 6,212,662. Nevertheless, without authorization, each u-blox defendant deliberately continued to infringe U.S. Patent No. 6,212,662 and also encouraged others to infringe U.S. Patent No. 6,212,662 as described above, including by selling and/or using '662 Accused Products in the United States.

55. Each u-blox defendant's acts of infringement have caused damage to KPN, and KPN is entitled to recover from each u-blox defendant the damages it has sustained as a result of such wrongful acts in an amount to be proven at trial.

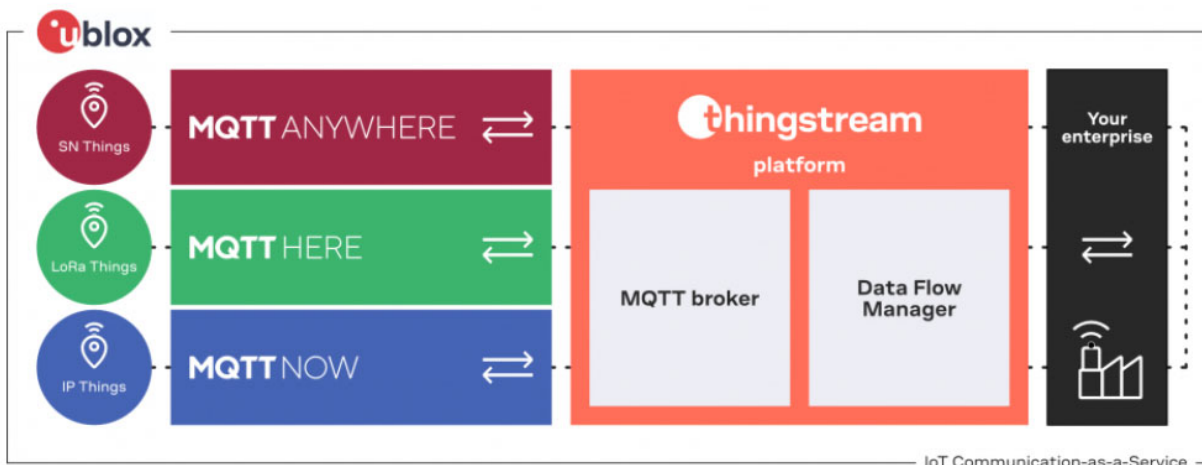
56. Further, KPN states that it is entitled to all damages to which it otherwise is entitled because it has complied with 35 U.S.C. § 287 in that it has not manufactured, used, sold, or offered for sale in the United States, or imported into the United States, any product that practices U.S. Patent No. 6,212,662 and is not aware of any licensee that manufactured, used, sold, or offered for sale in the United States, or imported into the United States, a product that practices U.S. Patent No. 6,212,662.

COUNT 2
INFRINGEMENT OF U.S. PATENT NO. 8,886,772

57. Plaintiff repeats and incorporates by reference each preceding paragraph as if fully set forth herein and further state:

58. On November 11, 2014, the U.S. Patent and Trademark Office duly and legally issued U.S. Patent No. 8,886,772, which is entitled “Method and System for Remote Device Management.” KPN is the owner by assignment of U.S. Patent No. 8,886,772 and holds all right, title, and interest to it, including the sole right to sue and recover for any and all infringements.. A true and correct copy of U.S. Patent No. 8,886,772 is attached as Exhibit C.

59. Each u-blox defendant directly infringed, and continues to infringe, U.S. Patent No. 8,886,772 in violation of 35 U.S.C. § 271(a) by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, without authorization, one or more products that practice various claims of U.S. Patent No. 8,886,772 literally or under the doctrine of equivalents (hereafter “’772 Accused Products”). At a minimum, such ’772 Accused Products include all devices configured to operate as described in Exhibit C. This includes u-blox Internet of Things (“IoT”) gateway products like the u-blox Nina W-15 and ODIN-W2 series products that are configured to be able to utilize and/or be utilized in conjunction with u-blox management platform products like u-blox’s Thingstream, MQTT ANYWHERE, MQTT HERE, and MQTT NOW communication services, as well as each such platform product alone.



<https://www.u-blox.com/en/iot-communication-service>.

60. As detailed below, the u-blox Nina W-15 and ODIN-W2 series products meet every element of at least Claim 10 of U.S. Patent No. 8,886,772 literally or under the doctrine of equivalents.² Further, the identified components and functionality of the u-blox Nina W-15 and ODIN-W2 series products are representative of the components and functionality present in all '772 Accused Products.

61. Claim 10 of U.S. Patent No. 8,886,772 recites a computer configured for remote device management, the computer comprising a processing unit and memory, the memory being connected to the processing unit, the computer being communicatively coupled to at least one database, a plurality of auto-configuration servers (ACSs), and a manageable electronic device, the computer being disposed as an intermediary between the manageable electronic device and the plurality of ACSs for controlling access to the ACSs, the at least one database storing information for the identification of electronic devices; wherein the computer is configured, responsive to receiving a request from a manageable electronic device for configuration data, to: identify the manageable electronic device by comparing at least a portion of the request with the

² This description is illustrative and not intended to be an exhaustive or limiting explanation of every manner in which each '772 Accused Product infringes U.S. Patent No. 8,886,772.

information for the identification of electronic devices of at least one database, and identify an ACS from the plurality of ACSs in accordance with the identification of the manageable electronic device to provide configuration data to the manageable electronic device, wherein configuration data comprises data for configuring the manageable electronic device, and wherein the computer is further configured to relay the request to the identified ACS.

62. The u-blox Nina W-15 and ODIN-W2 series products each are a computer configured for remote device management, the computer comprising a processing unit and memory, the memory being connected to the processing unit.

63. Further, each '772 Accused Product is configured to be communicatively coupled to at least one database and a plurality of auto-configuration servers (ACSs) and a manageable electronic device, the computer being disposed as an intermediary between the manageable electronic device and the plurality of ACSs for controlling access to the ACSs.

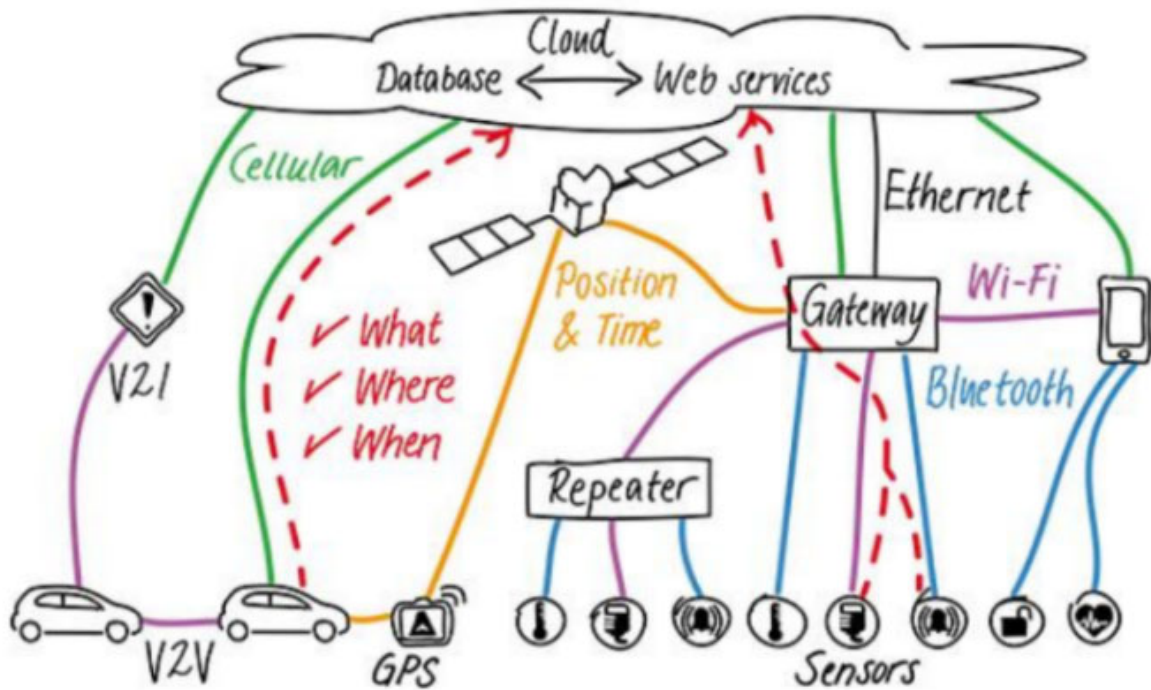
64. This is depicted below, which shows a u-blox Nina W-15 series product communicatively coupled as an intermediary between u-blox communication services, which house at least one database and a plurality of auto-configuration servers (ACSs), and a manageable electronic device like a u-blox Wi-Fi node or Bluetooth low energy node:



<https://www.u-blox.com/en/product/nina-w15-series>.

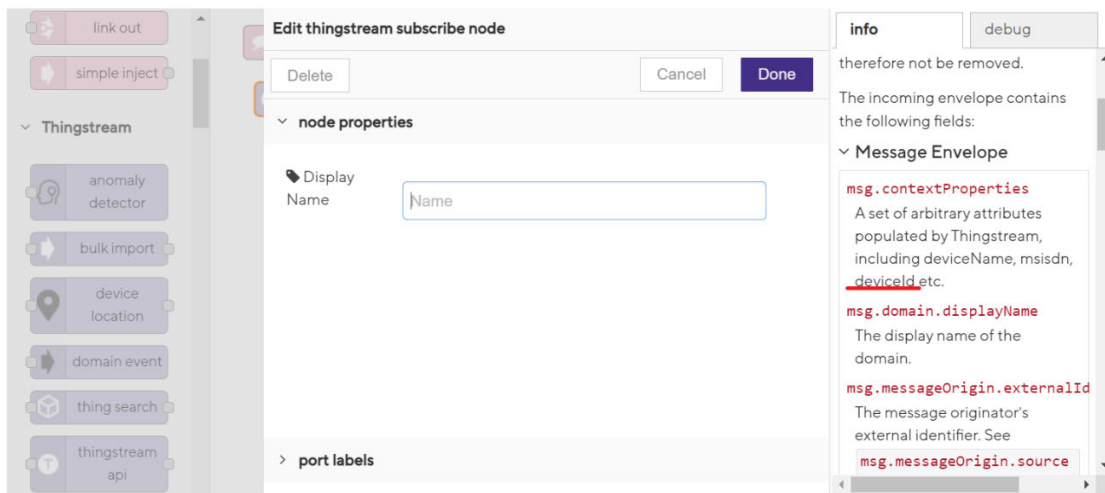
65. This also is depicted by the below, which demonstrates how u-blox intends its Nina W-15 and ODIN-W2 series products to be used as an intermediary between the “Cloud,” which houses at least one “database” and a plurality of auto-configuration servers (ACSs) (e.g., “web services”), and one or more manageable electronic devices (e.g., “sensors”):

u-blox = IoT Connectivity



<https://www.u-blox.com/en/publication/white-paper/use-case-possibilities-bluetooth-low-energy-iot-applications>.

66. Further, as depicted below, such at least one database stores information for the identification of electronic devices, including the authentication of such devices:



<https://www.u-blox.com/en/data-flow-manager>.

67. This also is demonstrated by the below “Device Identification Record” description from u-blox’s u-connectXpress-AT commands manual:

6.28 Device ID record +UBTDIR

+UBTDIR				
Modules	ODIN-W2			
	NINA-B2, NINA-W15			
Attributes	Syntax	Settings saved	Can be aborted	Response time
	Full	Profile	No	-

6.28.1 Description


Read and write Device Identification Record.

6.28.2 Syntax

AT Command	Description
AT+UBTDIR=<vendor_id>,<vendor_id_source>,<product_id>,<vendor_version>	Write device record.
AT+UBTDIR?<param_tag>,<param_val>	Read device record.

Response	Description
+UBTDIR:<vendor_id>,<vendor_id_source>,<product_id>,<vendor_version> OK	Successful read response.
OK	Successful write response.
ERROR	Error response.

6.28.3 Defined values

Parameter	Type	Description
vendor_id	Byte_Array	<p>Unique identifier for the vendor of the device. Used in conjunction with required attribute 0205 and VendorIDSource, which determines the organization that assigned the VendorID value.</p> <p> The Bluetooth Special Interest Group assigns Device ID Vendor ID and the USB Implementer's Forum assigns vendor IDs, either of which can be used for the VendorID value here. Device providers should procure the vendor ID from the USB Implementer's Forum or the company identifier from the Bluetooth SIG. The VendorID "FFFF" is reserved as the default VendorID when no Device ID Service Record is present in the device.</p>
vendor_id_source	Integer	<p>Organization that assigned the VendorID attribute:</p> <p>1: Bluetooth SIG</p> <p>2: USB Implementer's forum</p>
product_id	Byte_Array	Identifies different products from the same vendor.
vendor_version	Byte_Array	<p>A numeric expression identifying the device release number in Binary-Coded Decimal. This is a vendor-assigned field, which defines the version of the product identified by the VendorID and ProductID attributes. This attribute is intended to differentiate between the versions of products with identical VendorIDs and ProductIDs.</p> <p>The value of the field is JJMN for version JJ.M.N (JJ - major version number, M - minor version number, N - sub-minor version number). For example, version 2.1.3 is represented with value 0213 and version 2.0.0 is represented with a value of 0200. When upward-compatible changes are made to the device, it is recommended to increment the minor version number. If incompatible changes are made to the device, it is recommended to increment the major version number.</p>

https://www.u-blox.com/sites/default/files/u-connectXpress-ATCommands-Manual_UBX-14044127.pdf.

68. Further, each '772 Accused Product is configured, responsive to receiving a request from a manageable electronic device for configuration data, to identify the manageable electronic device by comparing at least a portion of the request with the information for the identification of electronic devices of at least one database, and identify an ACS from the plurality of ACSs in accordance with the identification of the manageable electronic device to provide configuration data to the manageable electronic device.

69. This is demonstrated below, which depicts how each manageable electronic device is configured to request configuration data via, e.g., a GET and/or POST message:

The screenshot displays a REST client interface for a GET request to the endpoint `/properties/thing/{deviceId}`. The response is a JSON object with a status of 200. The JSON structure is as follows:

```

{
  "properties": [
    {
      "name": "string",
      "description": "string",
      "type": "INT",
      "value": "string"
    }
  ]
}

```

Below the JSON response, the 'Response Content Type' is set to `application/json`. A 'Parameters' table is also visible, detailing the `deviceId` parameter.

Parameter	Value	Description	Parameter Type	Data Type
<code>deviceId</code>	<input type="text" value="(required)"/>		path	string

POST /properties/domain MJH - Store Domain Properties

Parameters

Parameter	Value	Description	Parameter Type	Data Type
body	(required)		body	Model Model Schema

Parameter content type: application/json

```

{
  "properties": [
    {
      "name": "string",
      "description": "string",
      "type": "INT",
      "value": "string"
    }
  ]
}
    
```

Click to set as parameter value

Response Messages

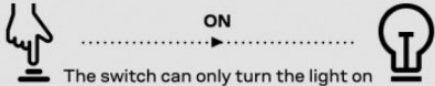
HTTP Status Code	Reason	Response Model	Headers
204	Thing Properties Updated		
401	Credentials Incorrect		
422	Validation Failure	Model Model Schema	

<https://api.thingstream.io/swagger>.

70. This also is demonstrated by the below, which describes how each '772 Accused Product is configured to receive such configuration requests messages and then relay them to subscribed clients (i.e., the identified ACS):


Advantages of MQTT

Simplified communication
 Communication is a complex problem. MQTT reduces complexity, allowing a single connection to a message topic. Data is logically structured and can be processed flexibly.




The switch can only turn the light on


Eliminate polling
 MQTT allows instantaneous, push-based delivery, eliminating the need for message consumers to periodically check or "poll" for new information. This dramatically reduces network traffic.



Dynamic targeting
 MQTT makes discovery of services easier and less error prone. Instead of maintaining a roster of peers that an application can send messages to, a publisher will simply post messages to a topic.



Decouple and scale
 MQTT also makes solutions more flexible and enables scale. It allows changes in communication patterns, adding or changing functionality without sending ripple effects across the system.



<https://www.u-blox.com/en/blogs/insights/mqtt-beginners-guide>.

71. On information and belief, each u-blox defendant thus directly infringed, and continues to infringe, each element of Claim 10 of U.S. Patent No. 8,886,772 by selling and offering to sell in the United States, and by importing into the United States, without authorization, '772 Accused Products like the u-blox Nina W-15 and ODIN-W2 series products.

72. In addition, each u-blox defendant indirectly infringed, and continues to indirectly infringe, U.S. Patent No. 8,886,772 in violation of 35 U.S.C. § 271(b) by taking active steps to encourage and facilitate direct infringement by third parties, including partners, service providers, manufacturers, importers, resellers, customers, and/or end users, in this District and elsewhere in the United States, through the dissemination of the '772 Accused Products and the creation and dissemination of promotional and marketing materials, supporting materials, instructions, product manuals, and/or technical information relating to such products with knowledge and the specific intent that its efforts will result in the direct infringement of U.S. Patent No. 8,886,772. Examples of such steps include the following: <https://www.u-blox.com/en/blogs/insights/mqtt-beginners-guide>; <https://www.anybus.com/products/wireless-solutions/wireless-bolt#jump2>; <https://www.u-blox.com/en/casestudies/upstream-health-mqtt-anywhere>; <https://www.u-blox.com/en/blogs/tech/u-blox-connected-car-node-fast-track-connected-vehicle-solutions>; <https://www.u-blox.com/en/casestudies/streamline-mqtt-anywhere-iot-logistics-transport-hijack>; <https://www.u-blox.com/en/leikr-%E2%80%93wearable-connected-healthcare>.

73. In addition, on information and belief, each u-blox defendant took, and continues to take, active steps to encourage various distributors and re-sellers to sell and offer for sale each '772 Accused Product despite knowing of U.S. Patent No. 8,886,772 and the fact that such sales

and offers for sale would infringe each element of at least Claim 10 of U.S. Patent No. 8,886,772.

74. Such active steps include, for example, advertising and marketing the infringing functionality of each '772 Accused Product as demonstrated above, including its ability to manage remote devices, and distributing such devices to United States consumers and resellers.

75. Each u-blox defendant also took, and continues to take, active steps to encourage end users of each '772 Accused Product to use the product in the United States in a manner that would directly infringe each element of at least Claim 10 of U.S. Patent No. 8,886,772 as described above, including by creating and distributing Nina W-15 and ODIN-W2 series products and encouraging users to utilize each to manage remote devices using one or more '772 Accused Products.

76. In short, each u-blox defendant actively induced, and continues to actively induce, the direct infringement of U.S. Patent No. 8,886,772 by resellers and end users by distributing '772 Accused Products and, among other things, marketing their use and capabilities and describing and instructing how to use them in an infringing manner. Further, each u-blox defendant took such active steps after receiving the above described notice of U.S. Patent No. 8,886,772 and its infringement of it.

77. In addition, each u-blox defendant has indirectly infringed and continues to indirectly infringe U.S. Patent No. 8,886,772 in violation of 35 U.S.C. § 271(c) by selling or offering to sell in the United States, or importing into the United States, '772 Accused Products with knowledge that they are especially designed or adapted to operate in a manner that infringes U.S. Patent No. 8,886,772 and despite the fact that the infringing technology or aspects of each

'772 Accused Products are not a staple article of commerce suitable for substantial non-infringing use.

78. In addition, each u-blox defendant's infringement of U.S. Patent No. 8,886,772 was and is willful. At least by April 23, 2021, KPN had provided each with notice of U.S. Patent No. 8,886,772. Nevertheless, without authorization, each u-blox defendant deliberately continued, and continues, to infringe U.S. Patent No. 8,886,772 and also encouraged others to infringe U.S. Patent No. 8,886,772 as described above, including by selling and/or using '772 Accused Products in the United States.

79. Each u-blox defendant's acts of infringement have caused damage to KPN, and KPN is entitled to recover from each u-blox defendant the damages KPN has sustained as a result of such wrongful acts in an amount to be proven at trial.

80. Further, KPN states that it is entitled to all damages to which it otherwise is entitled because it has complied with 35 U.S.C. § 287 in that it has not manufactured, used, sold, or offered for sale in the United States, or imported into the United States, any product that practices U.S. Patent No. 8,886,772 and is not aware of any licensee that manufactured, used, sold, or offered for sale in the United States, or imported into the United States, a product that practices U.S. Patent No. 8,886,772.

DEMAND FOR JURY TRIAL

81. Plaintiff hereby demands a jury trial for all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays for judgment as follows:

- A. Declaring that each u-blox defendant infringed the U.S. Patent Nos. 6,212,662 and 8,886,772;
- B. Awarding damages to KPN for such infringement, including enhanced damages pursuant to 35 U.S.C. § 284 and prejudgment and post-judgment interest;
- C. Awarding KPN its attorneys' fees pursuant to 35 U.S.C. § 285 or as otherwise permitted by law;
- D. Awarding all other costs and relief that the Court deems just and proper.

Date: May 20, 2021

Respectfully submitted,

FARNAN LLP

/s/ Brian E. Farnan

Brian E. Farnan (Bar No. 4089)
Michael J. Farnan (Bar No. 5165)
919 N. Market St., 12th Floor
Wilmington, DE 19801
Tel: (302) 777-0300
Fax: (302) 777-0301
bfarnan@farnanlaw.com
mfarnan@farnanlaw.com

Lexie G. White (admitted *pro hac vice*)
SUSMAN GODFREY, L.L.P.
1000 Louisiana Street, Suite 5100
Houston, Texas 77002
Telephone: (713) 651-9366
Facsimile: (713) 654-6666
lwhite@susmangodfrey.com

Andres C. Healy (admitted *pro hac vice*)
SUSMAN GODFREY L.L.P.
1201 Third Avenue Suite 3800
Seattle, WA 98101-3000

Telephone: (206) 505-3843
Facsimile: (206) 516-3883
ahealy@susmangodfrey.com

Tamar Lusztig (admitted *pro hac vice*)
Edward Delman (admitted *pro hac vice*)
SUSMAN GODFREY L.L.P.
1301 Avenue of the Americas, 32nd Floor
New York, NY 10019
Telephone: (212) 336-8330
Facsimile: (212) 336-8340
tlusztig@susmangodfrey.com
edelman@susmangodfrey.com

Attorneys for Plaintiff