UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

ORANGE ELECTRONIC CO. LTD., Plaintiff, v. AUTEL INTELLIGENT TECHNOLOGY CORP., LTD. Defendant.	Civil Action No. 2:21-cv-240 **JURY TRIAL DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Orange Electronic Co. Ltd. ("Orange") files this Complaint against Defendant Autel Intelligent Technology Corp., Ltd. ("Autel"), based on its own knowledge as to itself and its own actions, and based on information and belief as to all other matters, alleging as follows:

INTRODUCTION

This matter involves Orange's tire pressure monitoring system ("TPMS") patent (U.S. Patent No. 8,031,064 C3) infringed by Autel's tire pressure monitoring system (TPMS) products ("Autel's TPMS products"). TPMS products detect/monitor air pressure in the tires of a vehicle and are now included in nearly every modern vehicle. Technology underlying the manufacture and use of TPMS products is, in short, extremely valuable.

I.

THE PARTIES

1. Plaintiff Orange Electronic Co. Ltd. ("Orange") is a Taiwanese company located at 5F, No.29, Keya Rd. Central Taiwan Science Park, Taichung 42881, Taiwan.

2. Defendant Autel Intelligent Technology Corp., Ltd. ("Autel") is a Chinese company located at 7th, 8th and 10th Floor, Building B1, Zhiyuan, Xueyuan Road, Xili, Nanshan, Shenzhen, 518055, China.

II.

NATURE OF THE ACTION

3. This is an action for patent infringement.

4. Orange is informed and believes and alleges that Autel has been and is currently infringing and/or contributing to and/or actively inducing others to infringe claims of U.S. Patent No. 8,031,064 C3 ("the '064 Patent" or "the Asserted Patent").

III.

JURISDICTION AND VENUE

5. This action arises under the patent laws of the United States, Title 35 of the United States Code, 35 U.S.C. § 1 *et seq*.

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

7. This Court has at least specific personal jurisdiction over Autel because Autel has substantial contacts and conducts business in the State of Texas and in this

District and has been infringing, contributing to the infringement of and/or actively inducing others to infringe claims of the Asserted Patent in Texas and elsewhere.

8. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391(b), 1391(c), 1391(d) and/or 1400(b) because a substantial part of the events giving rise to Orange's claims occurred in the Eastern District of Texas and because Autel is subject to personal jurisdiction in the Eastern District of Texas.

IV.

FACTUAL BACKGROUND

9. The '064 Patent relates to a tire pressure detecting apparatus including an identification rewriteable tire pressure detector and a setting apparatus.

10. On October 4, 2011, U.S. Patent No. 8,031,064, titled "Tire Pressure Detecting Apparatus and Tire Pressure Detector Identification Copying Method for the Same" was duly and legally issued by the United States Patent and Trademark Office to Hung-Chih Yu.

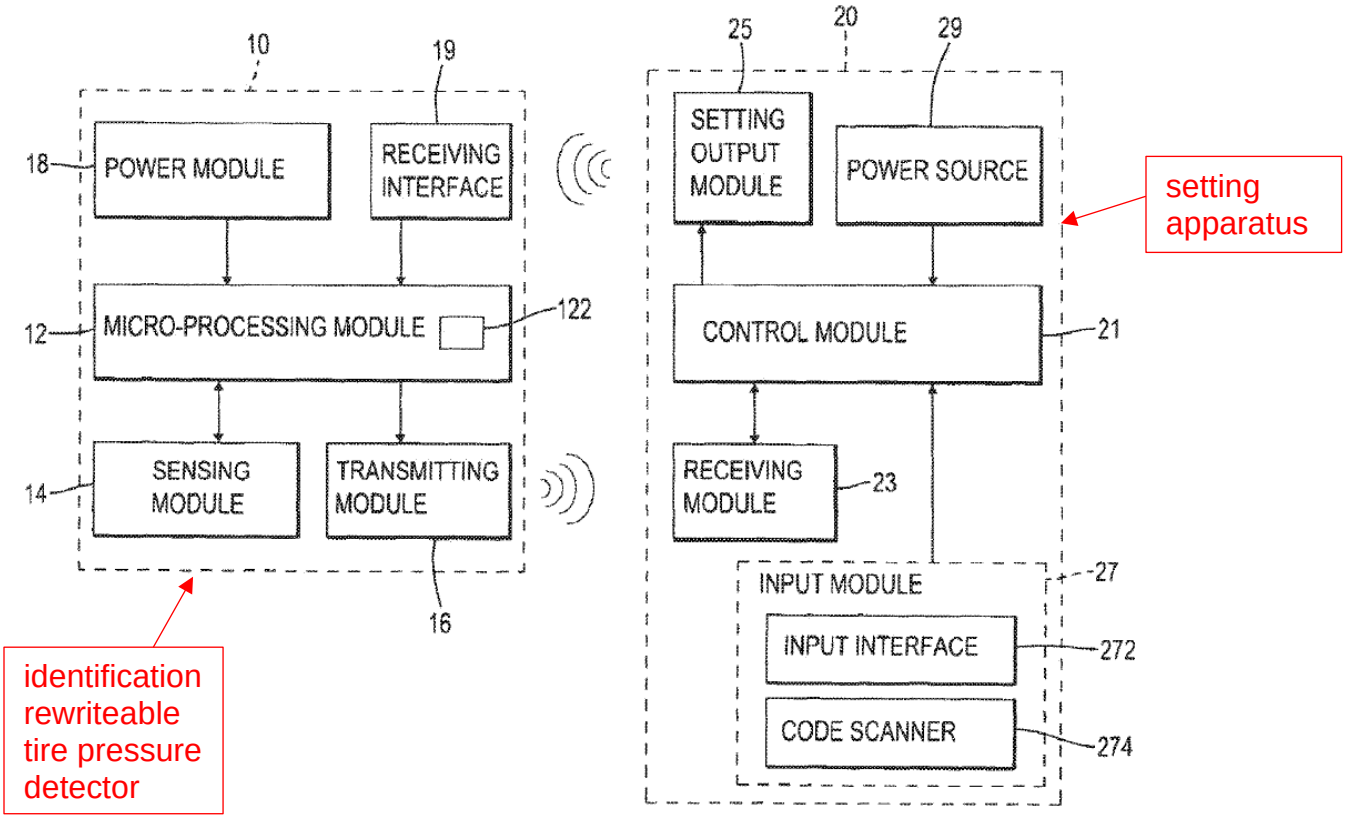
11. On November 7, 2013, a reexamination certificate was issued as U.S. Patent No. 8,031,064 C1, in which the patentability of claims 8 and 10-13 were confirmed, claims 1-7 and 9 were cancelled, and new claims 14 and 15 were added and determined to be patentable.

12. On December 12, 2014, a reexamination certificate was issued as U.S. Patent No. 8,031,064 C2, in which claims 8 and 10-15 were cancelled and new claims 16-25 were added and determined to be patentable.

13. On May 15, 2020, a reexamination certificate was issued as U.S. Patent No. 8,031,064 C3 (the "'064 Patent"), in which claims 20 and 22 were cancelled, claims 16, 18, 21, 23, 24, and 25 were determined to be patentable as amended, claims 17 and 19 were determined to be patentable, and new claims 26-29 were added and determined to be patentable. A true copy of the original reexamined '064 Patent is attached as **Exhibit 1**.

14. Hung-Chih Yu duly assigned the '064 Patent to Orange on September 17, 2008. Orange is the owner of the '064 Patent with all substantive rights in and to that patent, including the sole and exclusive right to prosecute this action and enforce the '064 Patent against infringers, and to collect damages for infringement during all relevant times.

15. Reproduced immediately below is "FIG. 1" from the '064 Patent, annotated to identify the identification rewriteable tire pressure detector and the setting apparatus:



16. Orange manufactures or licenses other companies to manufacture the TPMS products claimed in the Asserted Patent. This TPMS apparatus is sold to various distributors and tire stores who obtain the right to use the patented inventions in their vehicles by purchasing from Orange or from an authorized manufacturer. Companies who do not obtain a license from Orange do not have permission to manufacture or sell the patented TPMS products.

17. Orange is informed and believes and alleges that Autel has made, used, provided, supplied, distributed, sold, and/or offered for sale in the United States and in this district, TPMS products that infringe the Asserted Patent, without authorization from Orange and continues to do so now.

18. Autel has manufactured and sold Autel's TPMS products that infringe the Asserted Patent and which include at least, but not limited to, MaxiTPMS TS501, MaxiTPMS TS601, TS401, TS408, TS508, TS608, MS906TS, ITS 600, TS508WF, 1-Sensor (Press-in) M, 1-Sensor (Press-in) R, 1-Sensor (Screw-in) M, 1-Sensor (Screw-in) R, 315MHz MX-Sensor M, 433MHz MX-Sensor M, 315Mhz MX-Sensor R, and 433MHz MX-Sensor R.

19. As shown in more detail below, Autel's TPMS products include each and every limitation of at least, but not limited to, claims 23 and 26-29 of the '064 Patent and therefore literally infringe these claims. Orange reserves the right to assert additional claims and to assert infringement under the doctrine of equivalents in light of information learned during discovery or in view of this Court's claim construction order.

20. An image of Autel's TPMS products found in the MaxiTPMS TS501 is shown below. Autel's TPMS products include a MaxiTPMS TS501 (1) and a MX-sensor (2), all of the same fundamental components claimed in the Asserted Patent.

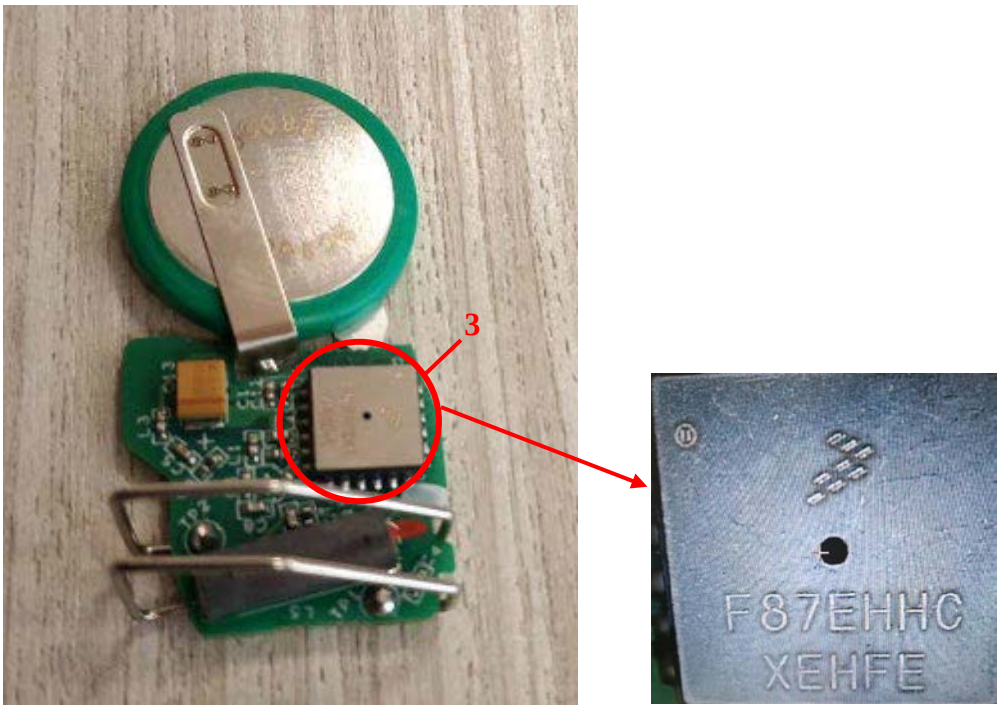
21. As shown below at page 1 in Autel's website attached as **Exhibit 2**, the MX-sensor (2) is a tire pressure sensor that is ID clone-able, and may be installed in a vehicle.

1-Sensor R (Press-in)

PROGRAMMABLE UNIVERSAL TPMS SENSOR

Autel 1-Sensor R combines both 315MHz + 433MHz frequencies into one TPMS sensor with the highest industry vehicle coverage. The exclusive MX-Sensor patented PRESS release valve stem design, allows rubber and metal valve stems to freely interchange by hand, without requiring a tool for sensor head fitting. Built to match or exceed OEM sensors in frequency strength and durability, MX-Sensors are 100% ID clone-able with no relearn required and offer latest model vehicle coverage because they quickly update with an Autel wireless programming tool.

22. As shown below, the MX-sensor (2) includes a micro-processing module F87EHHC XEHFE (3). In addition, as shown below in at page 4 of Autel's FXTH87E_rev. 5.0 Reference Manual, attached as **Exhibit 3**, the micro-processing module F87EHHC XEHFE (3) includes a RAM memory which is a rewriteable memory.


3
F87EHHC
XEHFE

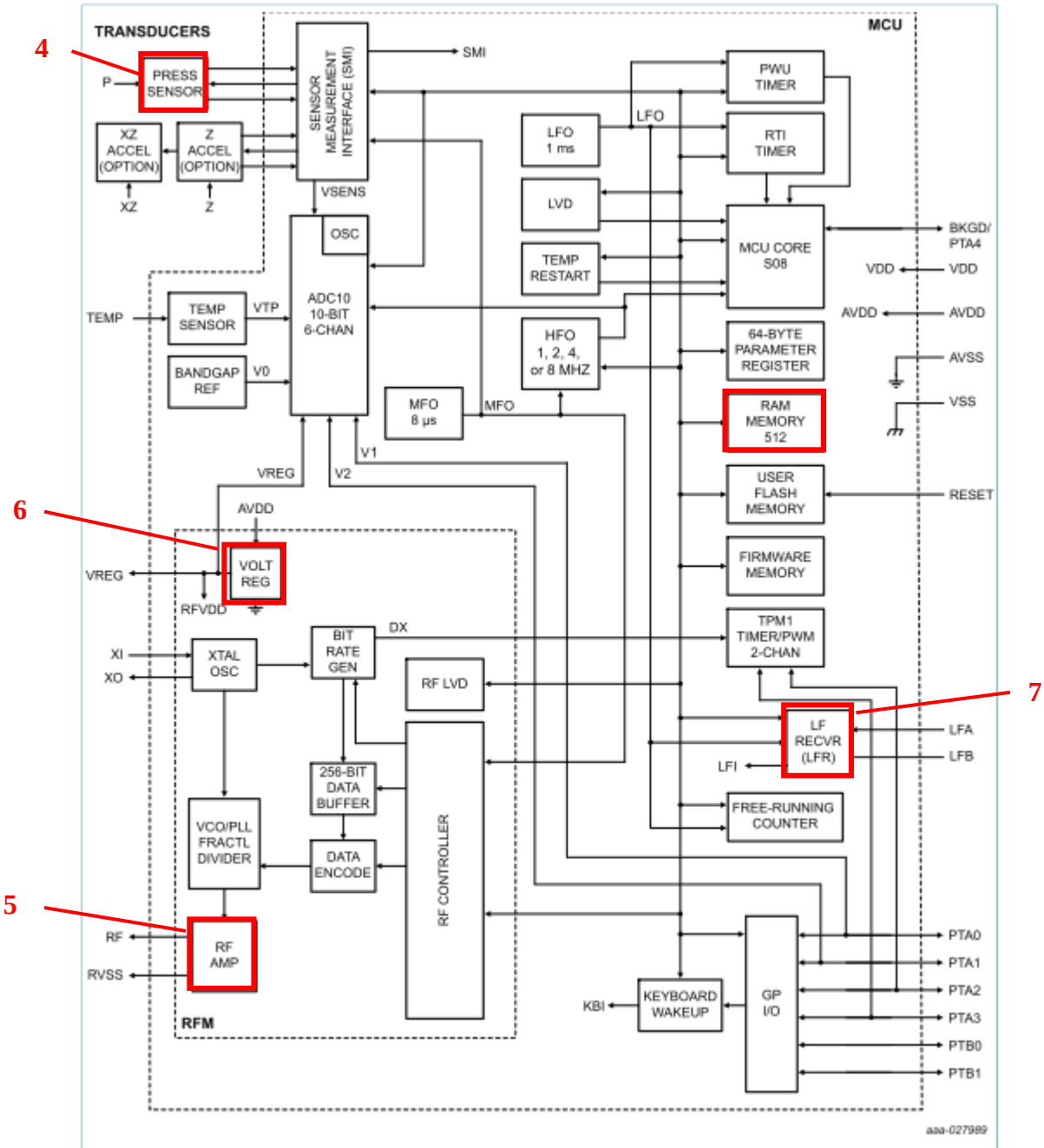


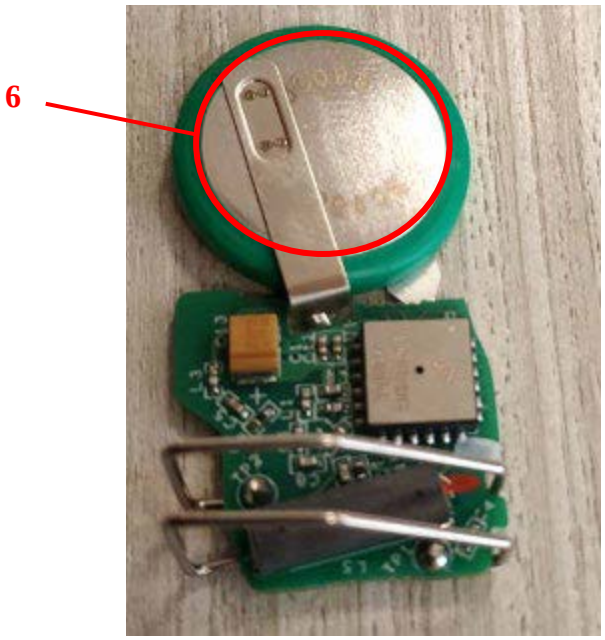
Figure 1. FXTH87E overall block diagram

23. As shown above in Autel's FXTH87E_rev. 5.0 Reference Manual at page 4, the MX-sensor (2) also includes a press sensor (4) that is electrically connected to the

micro-processing module (3), detects a tire pressure, and sends the detection result to the micro-processing module (3).

24. As shown above in Autel's FXTH87E_rev. 5.0 Reference Manual at page 4, the MX-sensor (2) also includes an RF AMP (5) that is controlled by the micro-processing module (3) to transmit a radio frequency (RF) signal including an ID of the MX-sensor (2).

25. As shown below, Autel's MX-sensor (2) includes a battery (6) that supplies power. As shown above in Autel's FXTH87E_rev. 5.0 Reference Manual at page 4, in MX-sensor (2), the AVDD connects the battery (6) that is connected to the micro-processing module (3) and supplies power to the MX-sensor (2).



26. As shown above in Autel's FXTH87E_rev. 5.0 Reference Manual at page 4, the MX-sensor (2) also includes LF RECVR (7) which is an interface that receives an external signal and sends the received external signal to the micro-processor unit (3).

27. As shown below at page 54-55 in Autel's MaxiTPMS TS501 User Manual V2.0, attached as **Exhibit 4**, the external signals include an external ID to be written into the rewriteable memory unit or to be used to overwrite a present identification in the rewriteable memory unit of the MX-sensor (2).

2) Select **MX-Sensor** icon and a trigger mark will appear on the right side of the screen.

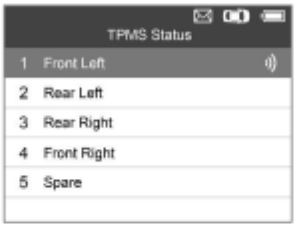


Figure 5.30

3) Use the **UP/DOWN** scroll button to select the corresponding wheel, press the **Y** button.

4) Select **Copy by Activation**, insert the correct MX-Sensor into the sensor slot, and then press the **Y** button to start programming the retrieved sensor information to the MX-Sensor.

54

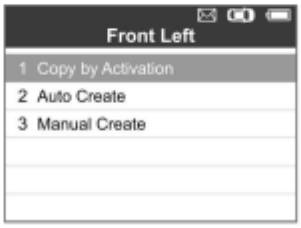
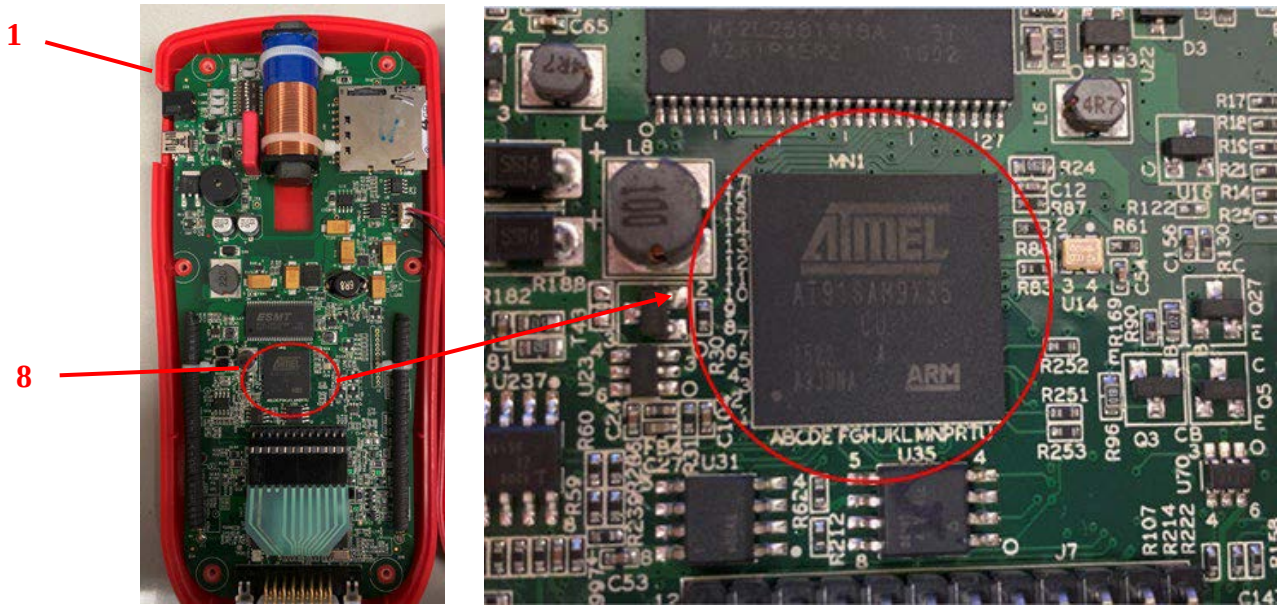


Figure 5.31

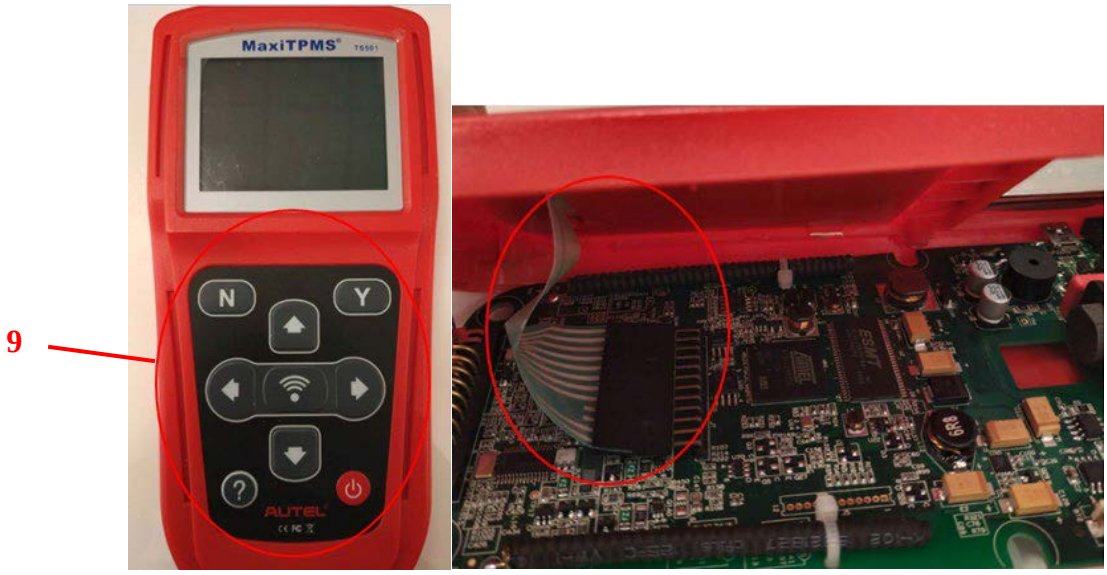
28. As shown below at page 4 in Autel's MaxiTPMS brochure, attached as **Exhibit 5**, the TS501 (1) is a portable device external to the vehicle that communicates with the MX-sensor (2).

29. As shown below, Autel's MaxiTPMS TS501 (1) includes a control module ATMEL SAM9X35 (8).



30. As shown below, Autel's MaxiTPMS TS501 (1) includes a keyboard (9) that receives a manual input and is connected to the control module ATMEL SAM9X35 (8). As shown below in Autel's MaxiTPMS TS501 User Manual V2.0 at pages 50-51,

the keyboard (9) can receive a manual input of an identification to be written into the MX-sensor (2).



5.2 Manual Create

This function allows user to manually enter sensor IDs. Users can enter the random ID or the original sensor ID, if it's available.

NOTE: *Do not enter the same ID for each sensor.*

1) Follow the steps in ***5.1 Auto Create*** to select **MX-Sensor** icon and then select the required wheel position and press the **Y** button for All Wheels mode.

   Under One Wheel mode, follow the steps in ***5.1 Auto Create*** to select **MX-Sensor** icon and press the Y button.

2) Use the **UP/DOWN** scroll button to select **Manual Create** and press the **Y** button (Figure 5.22 for All Wheel Mode, Figure 5.23 for One Wheel Mode).

Figure 5.22

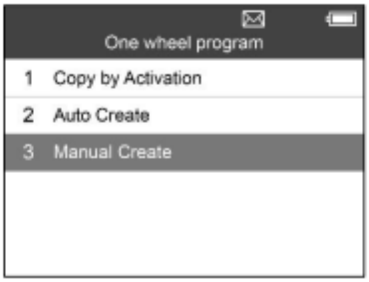
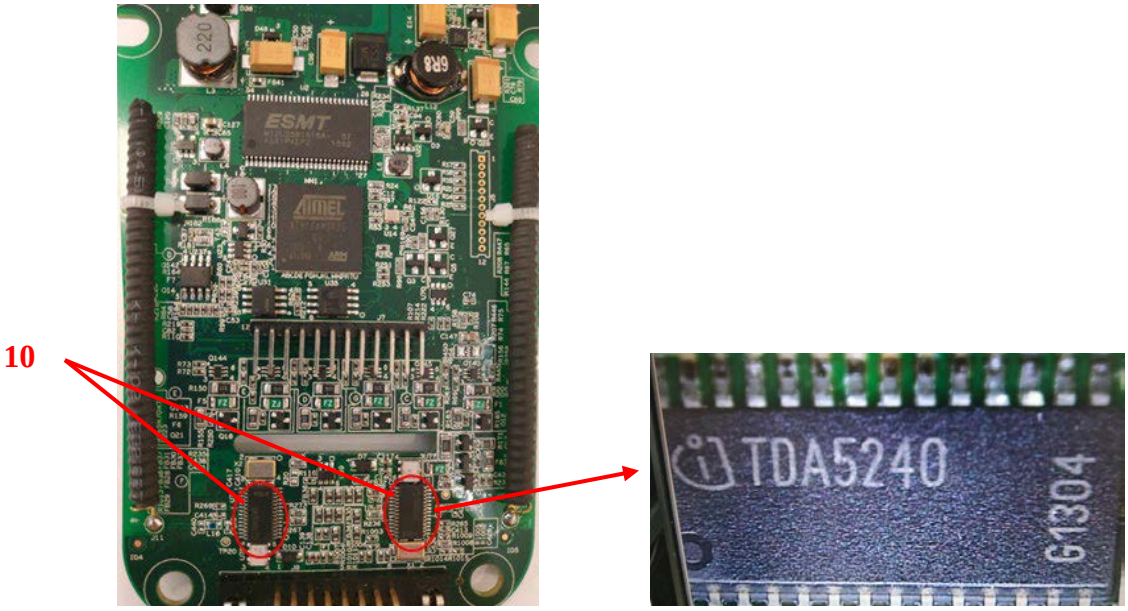
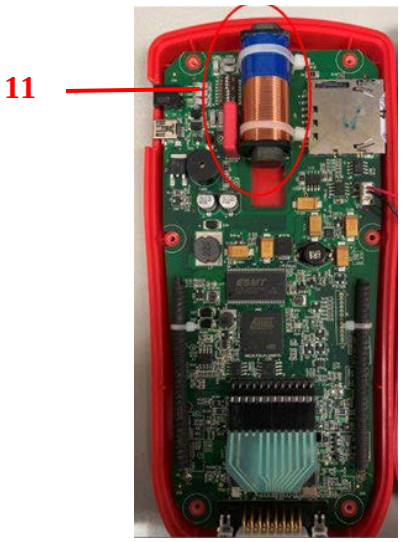


Figure 5.23

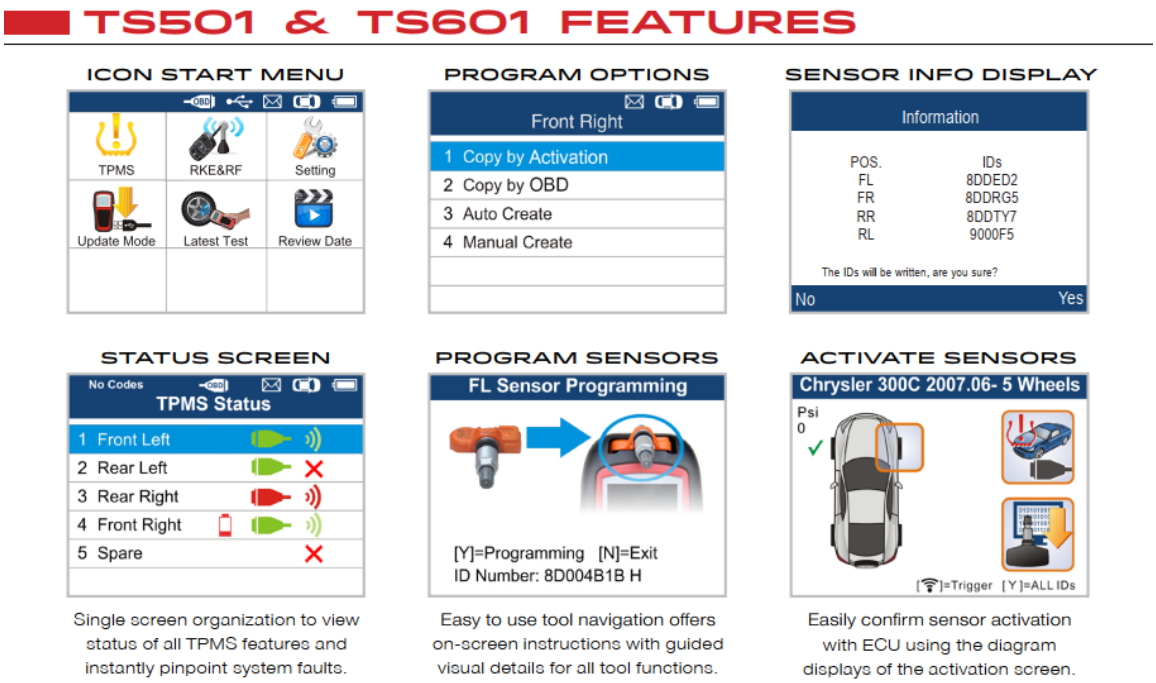
31. As shown below, Autel's MaxiTPMS TS501 (1) includes a receiving module Infineon-TDA5420-DS (10) connected to a control module ATMEL SAM9X35 (8) to receive an RF signal from the MX-sensor (2) and send the received RF signal to the control module ATMEL SAM9X35 (8).



32. As shown below, Autel's MaxiTPMS TS501 (1) includes an output module (11) as annotated that is controlled by the control module ATMEL SAM9X35 (8), to send the external signal to the MX-sensor (2).



33. As shown below in Autel's MaxiTPMS brochure at page 4, the external signal is generated by the control module ATMEL SAM9X35 (8) that includes the ID provided by the keyboard (9) or provided by the RF signal received by the receiving module Infineon-TDA5420-DS (10).



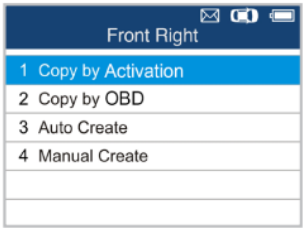
34. As shown below, Autel's MaxiTPMS TS501 (1) includes a battery (12) that acts as a power source and is connected to the control module ATMEL SAM9X35 (8).

35. As shown below in Autel's MaxiTPMS brochure at page 4 and Autel's MaxiTPMS TS501 User Manual V2.0 at pages 50-51, Autel's MaxiTPMS TS501 (1) is configured to obtain an update ID to be written into a new MX-sensor either by copying by activation, receiving the RF signal from an old tire pressure detector by the receiving module, retrieving an old identification of the old tire pressure detector from the RF signal, and using the old identification as the update identification, or by receiving a manual input of the ID from the keyboard (9), and using the ID as the update identification.

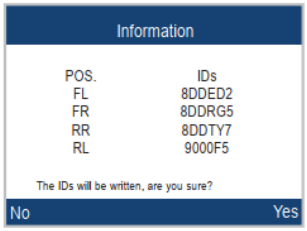
TS501 & TS601 FEATURES

ICON START MENU

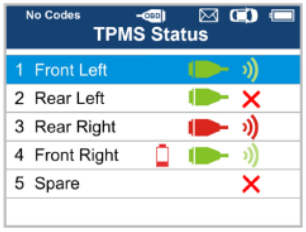
PROGRAM OPTIONS



SENSOR INFO DISPLAY

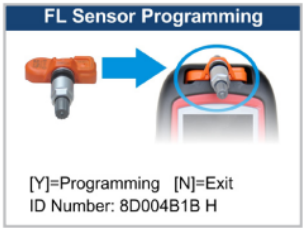


STATUS SCREEN



Single screen organization to view status of all TPMS features and instantly pinpoint system faults.

PROGRAM SENSORS



Easy to use tool navigation offers on-screen instructions with guided visual details for all tool functions.

ACTIVATE SENSORS

Easily confirm sensor activation with ECU using the diagram displays of the activation screen.

5.2 Manual Create

This function allows user to manually enter sensor IDs. Users can enter the random ID or the original sensor ID, if it's available.

NOTE: *Do not enter the same ID for each sensor.*

1) Follow the steps in *5.1 Auto Create* to select **MX-Sensor** icon and then select the required wheel position and press the **Y** button for All Wheels mode.

   Under One Wheel mode, follow the steps in *5.1 Auto Create* to select **MX-Sensor** icon and press the Y button.

2) Use the **UP/DOWN** scroll button to select **Manual Create** and press the **Y** button (Figure 5.22 for All Wheel Mode, Figure 5.23 for One Wheel Mode).

50

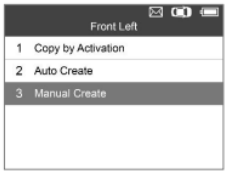


Figure 5.22

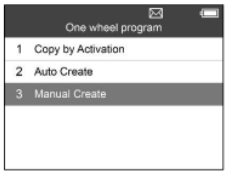
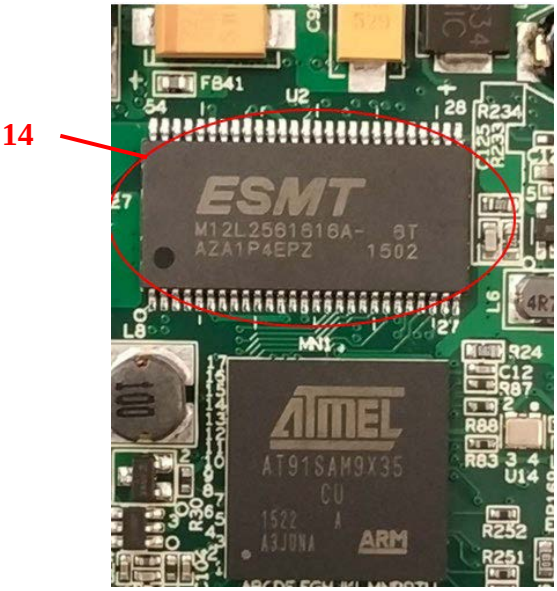


Figure 5.23

36. As shown below, the MX-sensor (2) originally only stores the preset ID 171186 (13).

37. As shown below, Autel's MaxiTPMS TS 501 (1) has a DRAM (14) and Autel's MaxiTPMS TS501 User Manual V2.0 at pages 53-54 show that the update identification is stored in the DRAM (14) of the TS 501 (1).



5.4 Copy by Activation

This function allows user to bypass OBD II and automatically write in the retrieved original sensor data to the MX-Sensor. It is used after the original sensor is triggered.

All Wheels Mode

1) From the activation screen, select the specific wheel position and press the **TEST** button to trigger the original sensor. When the information is retrieved, a series of beep sound will be heard.

Figure 5.29

2) Select **MX-Sensor** icon and a trigger mark will appear on the right side of the screen.

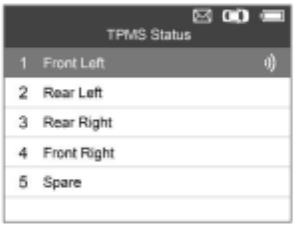


Figure 5.30

3) Use the **UP/DOWN** scroll button to select the corresponding wheel, press the **Y** button.

4) Select **Copy by Activation**, insert the correct MX-Sensor into the sensor slot, and then press the **Y** button to start programming the retrieved sensor information to the MX-Sensor.

38. As shown below in Autel's MaxiTPMS TS501 User Manual V2.0 at pages 55-56, the TS501 (1) can send signals to the MX-sensor (2) such that the MX-sensor (2) records the update identification in the rewritable memory unit or overwrites the original preset ID (13) in the rewritable memory unit by the update identification.

One Wheel Mode

1) From the activation screen, press the **TEST** button to trigger the original sensor. You can use the **LEFT/RIGHT** button to select the specific tire to be triggered. When the information is retrieved, a series of beep sound will be heard and the sensor information will display.

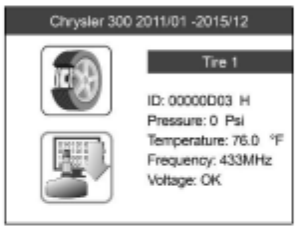


Figure 5.32

2) Select **MX-Sensor** icon and press the **Y** button, and then select "**Copy by Activation**" in the next screen.

Figure 5.33

3) Select the IDs you want to program with.

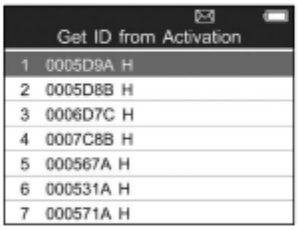


Figure 5.34

***NOTE:** In **One Wheel** mode, the tool can save at most 10 triggered sensors' information each time. Please do not use the MX-Sensors with the same ID in the same vehicle.*

In All Wheels mode, if you had successfully performed both the **Read IDs from Vehicle** function and the activation function, the screen may show as below. You can choose either Copy by Activation or Copy by OBD even the IDs are not matched.

39. As shown above in Autel's FXTH87E_rev. 5.0 Reference Manual at page 4, with respect to the LF RECVR (7) interface, the external signal is a low frequency signal.

40. As show below, the TS501 (1) judges the consistency of the update identification newly recorded in the rewritable memory unit and the preset identification of the MX-sensor (2) and when a same identification number as the present identification number of the MX-sensor (2) is input into the TS 501 (1), the input result is successful.

41. On July 9, 2020, Orange sent a letter to Autel, disclosing the '064 Patent and identifying accused TPMS products as infringing the '064 Patent.

42. Subsequent to the July 9, 2020, and knowing of its infringement as set forth in that letter, Autel continued to actively and knowingly contribute to, encourage, aid, and abet others to import, sell, offer to sell, and use the infringing TPMS products in the United States.

V.

CLAIMS FOR RELIEF

COUNT 1: INFRINGEMENT OF THE ’064 PATENT

43. The allegations of Paragraphs 1-42 are repeated and realleged as if fully set forth in this Count I of the Complaint.

44. Autel continued, after notice of infringement and without authority, to make, use, sell, offer to sell, and/or import into the United States Autel’s TPMS products as shown above.

45. Autel thus has infringed and continues to infringe at least claims 23 and 26-29 of the ’064 Patent literally and/or under the doctrine of equivalents.

46. Autel has also actively induced and will continue to actively induce the infringement of at least one of claims 23 and 26-29 of the ’064 Patent, in violation of 35 U.S.C. § 271(b), by, among other things, actively and knowingly aiding and abetting infringement of others through activities such as creating and/or distributing data sheets, requirements documents, assembly instructions and/or similar materials with instructions on creating, manufacturing, designing, assembling and/or implementing infringing products, with the specific intent to induce others to directly make, use, offer for sale, sell, and/or import into the United States products that fall within the scope of the ’064 Patent, without license or authority from Plaintiff. On information and belief, Autel knows that the induced acts constitute infringement of the ’064 Patent.

47. Autel individually, collectively, or through others or intermediaries, has contributorily infringed, and/or is contributorily infringing, in violation of 35 U.S.C. § 271(c), at least one claim of the ’064 Patent by making, using, offering for sale, selling, and/or importing, material parts of the inventions claimed in the ’064 Patent, which are not a staple article or commodity of commerce suitable for substantial non-infringing use, and knowing the accused parts to be especially made or especially adapted for use in an infringement of the ’064 claims.

48. Autel had knowledge of the ’064 Patent and of its infringement before the filing of this action. As discussed above, Orange disclosed the ’064 Patent to Autel in written correspondence that identified the ’064 Patent and the accused infringing TPMS products.

49. Autel also has knowledge of the ’064 Patent at least as of the date when it was notified of the filing of this action. Autel’s direct and indirect infringement of the ’064 Patent has thus been committed with knowledge of the ’064 Patent, making Autel liable for direct, indirect, and willful infringement.

50. Autel’s infringement of the ’064 Patent will continue to damage Orange, causing irreparable harm for which there is no adequate remedy at law, unless it is enjoined by this Court.

51. Orange has been damaged as a result of the infringing conduct by Autel alleged above. Thus, Autel is liable to Orange in an amount that adequately compensates

it for such infringement, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

52. Orange and/or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law.

V.

PRAYER FOR RELIEF

53. **WHEREFORE**, Plaintiff Orange asks this Court to enter judgment in its favor against Autel and grant the following relief:

54. An adjudication that Autel has infringed and continues to infringe the ’064 Patent;

55. An accounting of all damages sustained by Orange as a result of Autel’s acts of infringement of the ’064 Patent;

56. An award to Orange of actual damages adequate to compensate Orange for Autel’s acts of patent infringement, together with prejudgment and post-judgment interest;

57. An award to Orange of enhanced damages, up to and including trebling of Orange’s damages pursuant to 35 U.S.C. § 284 for Autel’s willful infringement of the ’064 Patent;

58. An award of Orange’s costs of suit and reasonable attorneys’ fees pursuant to 35 U.S.C. § 285 due to the exceptional nature of the case, or otherwise permitted by law;

59. A grant of a permanent injunction pursuant to 35 U.S.C. § 283, enjoining Autel, and each of its agents, servants, employees, principals, officers, attorneys, successors, assignees, and all those in active concert or participation with Autel, including related individuals and entities, customers, representatives, OEMs, dealers, and distributors from further acts of (1) infringement, and (2) active inducement to infringe with respect to the claims of the '064 Patent; and

60. Any further relief that this Court deems just and proper.

VI.

JURY DEMAND

Plaintiff Orange requests a jury trial on all issues triable to a jury in this matter.

DATE: June 30, 2021	Respectfully submitted, */s/ J. Thad Heartfield* J Thad Heartfield State Bar No. 09346800 THE HEARTFIELD LAW FIRM 2195 Dowlen Road Beaumont, TX 77706 Telephone: 409-866-3318 Facsimile: 409-866-5789 Email: thad@heartfieldlawfirm.com John F. Rabena Email: jrabena@sughrue.com William H. Mandir Email: wmandir@sughrue.com Fadi N. Kiblawi Email: fkiblawi@sughrue.com Young Sun Kwon Email: ykwon@sughrue.com

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