# UNITED STATES INTERNATIONAL TRADE COMMISSION WASHINGTON, D.C. 20436

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COMPONENTS FOR INSTALATION OF MARINE AUTOPILOTS WITH GPS OR IMU

Investigation No. 337-TA-

## COMPLAINT OF AMERICAN GNC UNDER SECTION 337 OF THE TARIFF ACT OF 1930, AS AMENDED

## **COMPLAINANTS**

## PROPOSED RESPONDENTS

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## PROPOSED RESPONDENTS (Cont.)

Flir Systems, Inc. 27700A SW Parkway Ave. Wilsonville, Oregon 97070

Raymarine UK Ltd. Marine House 5 Harbourgate Southampton Road Portsmouth Hampshire PO6 4QB United Kingdom

Raymarine Inc. 21 Manchester St. Merrimack, New Hampshire 3054

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- 2. Certified copy of recorded assignment
- 3. Furuno USA web site facilities list
- 4. Furuno organization chart
- 5. Furuno USA Product Listing
- 6. Alcom Marine (California) Furuno product list
- 7. Furuno dealer locator
- 8. Navico European locations
- 9, Navico US locations
- 10. Alcom Marine (California) B&G product list
- 11. Alcom Marine (California) Simrad product list
- 12. Simrad store locator
- 13. FLIR Press Release
- 14. Raymarine locations
- 15. Raymarine dealers
- 16. Raymarine Article (7.10.2008)
- 17. U.S. Patent No. 5,884,213
- 18. Furuno NavPilot 700/711/720 brochure
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- 20. Furuno NavPilot 500 brochure
- 21. B&G IMU Sensor Pack
- 22. Furuno Satellite Compasses
- 23. Furuno GPS receivers
- 24. Furuno Chart Plotters
- 25. Furuno multifunction displays
- 26. Furuno NavPilot 500 series brochure
- 27. Furuno NavPilot 700 Operators manual
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- 29. B&G H3000 brochure
- 30. Simrad product catalogue
- 31. Simrad AP24 Brochure
- 32. Simrad AP28 Brochure
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- 62. Declaration of Barry Horvick

# APPENDIX

- A.
- Four (4) copies of '976 patent file history (Exhibit 1) Four copies references mentioned in prosecution history. В.

## I. INTRODUCTION

- International Trade Commission commence and investigation pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337 ("Section 337"), to remedy the unlawful importation into the United States, the sale for importation, and/or the sale within the United States after importation by the owner, importer, consignee (or any agent of the owner, importer or consignee), of certain marine autopilots and components thereof (collectively "accused products") that infringe a valid and enforceable United States Patent owned by AGNC.
- 1.2 On information and belief, the respondents, Furuno Electronics Co., Ltd., Furuno U.S.A. Inc., Navico Norway AS, Navico UK, Ltd., Navico Inc., Flir Systems, Inc., Raymarine UK, Ltd., and Raymarine Inc. (collectively "proposed respondents" or "respondents"), have engaged in violations of Section 337 through the unlicensed importation into the United States, the sale for importation, and/or the sale within the United States after importation of accused products that infringe one or more claims of United States Patent No. 6,596,976 ("the '976 patent").
- 1.3 A certified copy of the '976 patent file history (including the '976 patent) accompany this Complaint as Exhibit 1. AGNC owns by assignment the entire right, title, and interest in and to the '976 patent. A certified copy of the recorded assignment accompanies this Complaint as Exhibit 2.
- 1.4 As required by Section 337(a)(2) and defined in Section 337(a)(3), an industry in the United States exists relating to AGNC's product, which is covered by the '976 patent.

1.5 Complainant seeks an exclusion order, pursuant to Section 337(d), permanently excluding the accused products from entry into the United States.

Complainant also seeks cease and desist the importation into the United States, the sale for importation, and/or the sale within the United States after importation of the accused products. Complainant also requests that the cease and desist order directs each respondent and its related entities and agents to cease demonstrating, selling, offering for sale, and using the accused products and to cease transferring, moving, or shipping their United States inventory of the accused products.

#### II. COMPLAINANT

- 2.1 AGNC is a California corporation having a principal place of business at 888 Easy Street, Simi Valley California 93065.
- 2.2 AGNC Corporation specializes in applying advanced technologies to contemporary problems of critical importance within the Guidance, Navigation, Control and Communications (GNCC), transportation, aerospace and defense industries. AGNC Corporation is a high-technology company that provides diversified engineering, maintenance and technical support services to both private and public sectors. Since its establishment in 1986, AGNC has been actively involved in autonomous vehicles; advanced GNCC systems design; automation and integration for aircraft, land vehicle, marine vehicle, missiles, satellites, spacecraft, large space structures; robotics, underwater vehicle applications; target acquisition, tracking and recognition for a variety of platforms. The results of the above R&D activities have been implemented as commercial products, http://www.americangnc.com/products/products.htm, through

capital investment. AGNC has acquired a complete, self-contained, manufacturing line to produce its products.

- 2.3 The inventor of the '976 patent, Dr. Ching-Fang Lin, is also the founder of the AGNC. Dr. Lin began his illustrious career at the University of Michigan in Ann Arbor, where he received his Ph.D. degree in Computer, Information, and Control Engineering in 1980. Dr Lin's career spans more than 25 years of teaching, research, industrial applications work, and senior management within the fields of guidance, navigation, control, and Communication (GNCC). These talents were manifest in the world's first and still best selling book series by Prentice Hall on GNCC systems and their applications, including GPS in 1990. Some of Dr. Lin's achievements and awards include:
  - a. SBA Small Business Person of the Year 2002
  - NASA Space Act Award Recognition for Inventions and Scientific and Technical Exceptional Contributions
  - c. Multiple Multiyear NASA Innovative Invention Award
  - d. Donald P. Eckman Award Nominee for Outstanding Control Engineer
  - e. Nominee for the Mechanics and Control of Flight Award
  - f. Who's Who in Leading American Executives
  - g. Five Hundred Leaders of Influence in the World
  - h. The International Who's Who of Intellectuals
  - i. Who's Who in Science and Engineering
  - j. Two Thousand Notable American Men
  - k. "Man of the Year 1993" of the International Biographical Association

"Most Admired Man of the Decade" of the American Biographical
 Institute

#### III. PROPOSED RESPONDENTS

- Ltd. is a company organized and existing under the laws of Japan with its principal place of business located at 9-52 Ashibara-cho, Nishinomiya City, Hyogo 662-8530 Japan. On information and belief proposed respondent Furuno U.S.A. Inc. has its principal place of business at 4400 NW Pacific Rim Boulevard, Camas, Washington 98607. See Exhibits 3 and 4. (Collectively referred to as "the Furuno proposed respondents.") On information and belief, Furuno U.S.A., Inc. is a subsidiary of Furuno Electric Co. On information and belief, Furuno U.S.A., Inc. is the main service and distribution center for Furuno products in North America. On information and belief, as shown in Exhibit 4, the Furuno proposed respondents manufactures the accused products in the Miki Factory located at 1 Tomoe, Besscho-cho, Miki City, Hyogo 673-0443 Japan. On information and belief, the Furuno proposed respondents import the accused products into the United States, sells the accused products for importation into the United States, and/or sells the accused products after they have been imported into the United States. See Exhibits 5, 6, 7 and 62.
- 3.2 On information and belief, proposed respondent Navico Norway AS is a company organized and existing under the laws of Norway with its principal place of business located at Strandveien 18 Lysaker N-1327 Norway. See Exhibit 8. On information and belief, Navico UK, Ltd. has a principal place of business at Premier Way, Abbey Park, Romsey Hampshire, United Kingdom 50519DM. On information and

belief, Navico Inc., has a principal place of business at 410 Amherst Street, Suite 110, Nashua, NH 03063 with offices at 12000 E Skelly Dr., Tulsa, Oklahoma 74128. See Exhibit 9. (Collectively referred to as "the Navico proposed respondents"). Navico is the parent company to five leading marine electronics brands that have been consolidated under one company. The Navico brands include B&G, Eagle, Lowrance, Northstar and Simrad. On information and belief, the Navico proposed respondents manufactures the accused products in Norway, and the United Kingdom under the brand names B&G and Simrad-Yachting and imports the accused products into the United States, sells the accused products for importation into the United States, and/or sells the accused products after they have been imported into the United States. See Exhibits 10, 11,12, 45, 46, 47 and 62

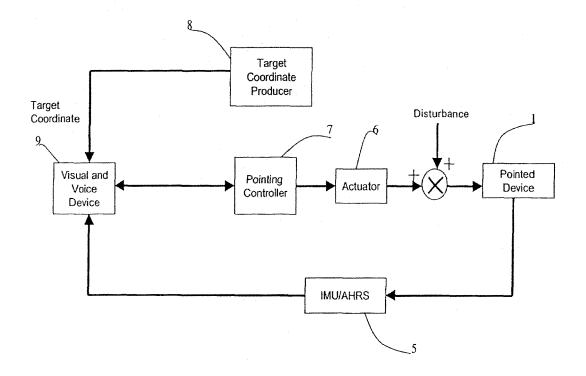
3.3 On information and belief, proposed respondent Flir Systems, Inc. is a company organized and existing under the laws of Oregon with its principal place of business located at 27700A SW Parkway Ave., Wilsonville, Oregon 97070. Exhibit 13 On information and belief, Raymarine UK has a principal place of business at Marine House, 5 Harbourgate, Southampton Road, Portsmouth Hampshire, PO6 4BQ, United Kingdom. On information and belief, Raymarine, Inc., has a principal place of business at 21 Manchester St., Merrimack, New Hampshire. Exhibit 14. (Collectively referred to as "the Raymarine proposed respondents.") On information and belief, on May 14, 2010, FLIR Systems, Inc. announced that it entered into a definitive sales agreement to acquire all of the outstanding shares of its wholly owned subsidiary Raymarine Holdings Limited, which includes ownership of Raymarine UK and Raymarine, Inc. Prior to acquisition, the Raymarine group was headquarters in Portsmouth, UK. On information

and belief, the Raymarine proposed respondents manufacture the accused products in Hungary and imports the accused products into the United States, sells the accused products for importation into the United States, and/or sells the accused products after they have been imported into the United States. See Exhibits 14, 15, 16 and 62.

## IV. THE TECHNOLIGY AND PRODUCTS AT ISSUE

- 4.1 The '976 patent is directed to a system and method for pointing and stabilizing a device that needs to be pointed in at a determined direction. In many applications, a user needs to command a device to be pointed and stabilized with specified orientation. For example, an antenna or a transmitter and receiver beam in a mobile communication system carried in a vehicle needs to be pointed at a communication satellite in orbit in dynamic environments. Or, a sniper rifle in the hands of a warrior of an Army elite sniper team needs to be pointed at a hostile target in a complex environment. Complexity is introduced into the environment by having a dynamic environment in which arbitrary disturbances or unwanted fluctuations are present.
- 4.2 As described in the '976 patent, the technology can be used to pointing and stabilizing of weaponry such as a rifle/missile. The smart machine gun application is required to perform its mission in the presence of disturbances, parametric uncertainties and malfunctions, and account for undesired vibration. As shown below, the pointing and stabilization system of the present invention for a device comprises an attitude producer 5, a target coordinate producer 8, a pointing controller 7, an actuator 6, and a visual and voice device 9. The attitude producer 5 can include an IMU/AHRS (Inertial

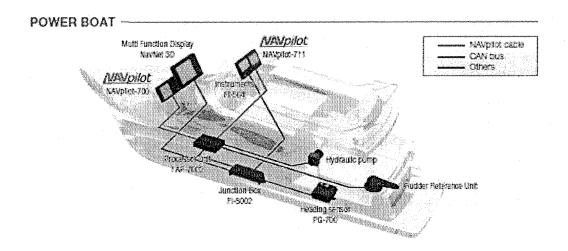
Measurement Unit/ Attitude and Heading Reference System) device or a GPS (Global Positioning System) attitude receiver that can determine the current attitude and the attitude rate measurements (rate of change). The target producer 8 acquires and tracks the target. The pointing controller 7 computes rotational commands to an actuator 6 using the desired pointing direction and the current attitude measurements.



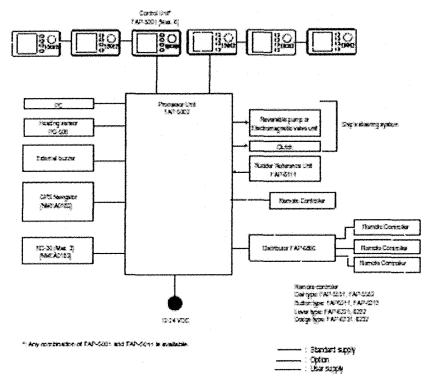
4.3 In the machine gun application, the user identifies the coordinates of a target by the use of the target coordinate producer 8, including a radar and laser rangefinder. The coordinates of a target are electronically relayed to the pointing controller 7 through the visual and voice device 9. The actuator 6, including a machine gunner, slews the gun barrel boresight toward the precise coordinates of the target so that it is ready to start laying down fire. The visual and voice device 9 shows the location of the target and the pointing procedure. After the user selects the target from the display,

the target coordinates are automatically relayed to the pointing controller 7, as well as current attitude of the device 1 from the inertial measurement unit (IMU) /attitude and heading reference systems (AHRS) 5. The actuator 6 (the machine gunner) interacts with the pointing controller 7 to implement the fire control mission.

- 4.4 This same system has been adopted by the proposed respondents for use in marine autopilots. Controlling a vessel, whether it be a motorized boat or a sail boat, is very complex in view of the changing wind and sea conditions. Waves, wind and tide can impact the ability to steer a vessel along an intended course.
- 4.5 In the marine environment, a variety of pointing systems have existed perhaps beginning with the weather vane that will point the vessel into the wind. With the advent of GPS, systems have been proposed to incorporate it as a replacement for a heading sensor. Thus, in one simplistic trolling motor application as shown in U.S. Patent No. 5,884,213, the system can use GPS as a substitute to a compass but does no predictive modeling and no compensation for disturbances or fluctuations. Exhibit 17. The system merely corrects the current heading of the vessel as direct result of the heading information.
- 4.6 Marine implementations of autopilot come in a variety of levels of complexity and can involve a number of components as can be seen from the Furuno NavPilot-700 brochure (Exhibit 18):

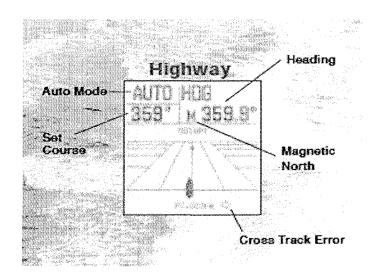


In many cases the systems are custom ordered. They can include the autopilot, a GPS/IMU (or Chartplotter with GPS), multifunction displays, actuators, etc. On information and belief these systems are imported and installed in the United States on a customer level basis. The components that make up a functioning autopilot system look like the following taken from the Furuno NavPilot-500 Operators Manual (Exhibit 19):



System configuration of NAVpliot-500

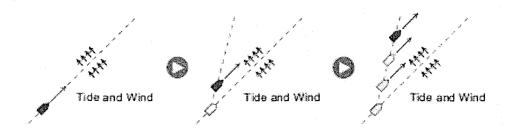
A control unit is provided that is connected to a processor unit. That in turn is connected to the ships steering through the use of an actuator. GPS navigation or Satellite antenna data can be provided that connects to the processor unit. External buzzers and displays are also provided. In the case of the Furuno Navpilot-500 that includes "highway" mode as show below (Exhibit 20):



Radar, IMUs and other equipment can be connected into the system depending on the capability ultimately required by the end user. See Exhibits 21 (IMU Sensor Pack), 22 (Satellite compass), 23 (GPS), 24 (GPS/Chartplotter) and 25 (multifunction displays).

- 4.7 The complexity of the systems can be seen when navigating to a waypoint. Because of the marine environment, the fastest direction to a waypoint, the course over ground, can be different from the course through water. Turning control of a vessel over to an autopilot has some inherent risk, which is why the accused systems include some form of collision avoidance features, which either manually or through activation of a button, divert the vessel from its intended course to avoid an approaching obstacle. Once diverted, the systems have the capability to bring the vessel back on course in much the same way as a target is tracked. The pointing and stabilizing technology of the present invention has been used by the accused systems to accomplish just such functionality.
- 4.8 The marine systems operate on a number of different levels. For example, when only heading is maintained (Auto mode for Furuno), the vessel maintains

its heading, however, can be pushed off its intended course by the wind or tide. See Exhibit 18.

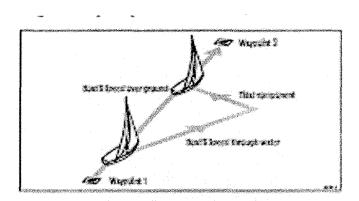


The net effect can be that the boat continues to point in the desired heading but the boat does not intercept the desired target.

- 4.9 The demand for more accurate steering, reducing overshoot, wear and fuel consumption has led the industry to incorporated technology developed in other areas to provide more accurate and safer pointing technology. Wandering can increase wear on the boat and increase fuel consumption. As recognized in Furuno's NavPilot-500 manual "This system is similar to the highly accurate and reliable systems used on aircraft, missiles and space vehicles." Exhibit 19.
- 4.10 When an autopilot is combined with a GPS or IMU, it is possible to maintain a set course that is not affected by wind and tide (e.g. Furuno Advanced mode). See Exhibits 18 and 19.



In this mode, the autopilot creates phantom waypoints (a target and starting location), which it uses to stay on the set course. Overcoming the effect of the tides can also referred to as tidal stream compensation. To avoid excess correction and to get the vessel to the target in the shortest amount of time, the vessel may be pointed in a direction different from the target in order to give the vessel the fastest intercept course to the target.

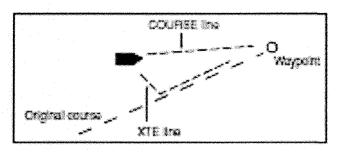


Ex. 37 at p. 20. As can be seen from Exhibit 20, the vessel may maintain an actual heading of 359.9° to achieve its set course of 359° to the waypoint.

4.11 Marine autopilots also incorporate a feature known as dodge that allows the helmsmen to order the autopilot to deviate from the set course to avoid an item.

When a dodge command is executed and the vessel deviates from the intended course, the waypoint (target) effectively moves. The autopilot systems continue to track the

location of the waypoints and the relative position and attitude of the vessel. The systems generally provide two solutions for resuming the journey which are course or cross-track. A graphic description of this capability taken from the Furuno NavPilot-500 Operator's Manual (Exhibit 19) is shown below.



NAV mode, COURSE and XTE

In the Course mode, the autopilot computes a new course directly to the previously set waypoint. In the cross-track mode, the autopilot computes a course back to the previous course and then resumes along the original course.

4.12 Installations of the accused autopilots with GPS or IMUS use the claimed technology of the '976 Patent to perform at least the post-dodge resumption of auto navigation to a designated waypoint. The current litigation is not limited to this one feature. However, in this mode the autopilot systems identify a desired pointing direction to an entered or phantom waypoint. The autopilot continues to track the relative location of the waypoint as it moves, or perceives to move. The GPS or IMU provide a current attitude measurement that includes the current location, heading, speed and rates of change. The autopilot computes rotation commands to the actuator connected to the vessel's rudder using the desired pointing direction and attitude measurements. The systems are provided with displays and alarms that assist in the pointing process.

#### V. THE '976 PATENT

- A. Identification of the Patent and Ownership by AGNC
- 5.1 The '976 Patent is entitled "Method and System for Pointing and Stabilizing a Device" and issued July 22, 2003. The '976 Patent issued from U.S. Patent Application No. 09/732,648, filed on December 7, 2000. The '976 Patent claims priority to Provisional Application No. 60/169,501, filed on December 7, 1999.
- 5.2 AGNC is the owner, by valid assignment, of the entire right, title, and interest in and to the '976 Patent. See Exhibit 2. The '976 Patent is valid, enforceable, and currently is in full force and effect.
- 5.3 Pursuant to Rule 210.12(c) of the Commission's Rules of Practice and Procedure, this Complaint is accompanied by Appendix containing: (A) Four copies of the file history of the '976 Patent, and (B) four copies of each patent and applicable pages of each technical reference mentioned in that prosecution history.
  - **B.** Non-Technical Description of the Patented Invention<sup>1</sup>
- 5.4 The '976 patent relates to a method and system for pointing and stabilizing a device which needs to be pointed and stabilized with a determined orientation, wherein output signals of an inertial measurement unit and the desired direction information are processed to compute rotation commands to an actuator; the actuator rotates and stabilizes the device at the desired direction according to the rotation commands. The method and system also provides a visual and voice device attached to provide a user

<sup>&</sup>lt;sup>1</sup> The content of this Complaint, including this section (i.e., "Non-Technical Description of the Patented Invention"), does not, and is not intended to, construe either the specification or claims of the '976 Patent.

with visualization and voice indications of targets and the pointing and stabilization operational procedure.

- C. Foreign Counterparts of the '976 Patent
- 5.5 There is one foreign counterpart to the '976 patent, TW587205. The patent has been abandon. No additional foreign patents/applications corresponding to the '976 Patent have been filed, abandoned, withdrawn, or rejected.

## VI. UNLAWFUL AND UNFAIR ACTS OF PROPOSED RESPONDENTS

- A. Proposed Furuno Respondents
- 6.1 On information and belief, proposed Furuno respondents' accused marine autopilots with a GPS or IMU directly (35 U.S.C. §271(a)) infringe and/or the accused marine autopilot indirectly infringe through the end user's combination with a GPS or IMU (35 U.S.C. §271(b) and (f)(1)) at least the following independent and dependent claims of the '976 Patent: claims 1, 2, 5, 10, 11, 12, 13, 28, 30, 54, 55 and 60. Discovery may reveal that proposed respondents infringe additional claims of the asserted patents. A representative claim charts applying independent claims 1 and 10 to the Furuno NavPilot 500 are attached as Exhibit 42.
- 6.2 The proposed Furuno respondents' use, sale, offer for sale and/or importation of the accused marine autopilots and related equipment (e.g., GPS, Chartplotter/GPS or Satellite compasses) directly infringe at least the foregoing claims of the '976 patent.
- 6.3 The proposed Furuno respondents will be given notice of their infringement of the '976 patent by at least the service and filing of this Complaint. In addition, Furuno was provided with notice of infringement on June 22, 2010.

CONFIDENTIAL Exhibit 60. Further, on information and belief, the proposed Furuno respondents knowingly induced end users to use the accused marine autopilots in an infringing manner, thereby inducing infringement of at least the foregoing claims of the '976 patent.

6.4 On information and belief, the accused products are manufactured at least in Japan by or for proposed respondents and imported into the United States, sold for importation, sold within the United States after importation by the proposed Furuno respondents. Exhibit 62. On information and belief, the accused products include at least the following products: NavPilot-500, NavPilot-500/OB, NavPilot-511, NavPilot-511/OB, NavPilot-510, Navpilot-520/OB, NavPilot -700, NavPilot-711, and NavPilot-720. On information and belief, Furuno also manufactures, sells and imports GPS/IMUs for use with said accused products including, but not limited to the GP32, GP37, GP150, GP7000/NT, GP7000F/NT, SC30 and SC50/110 satellite compass. On information and belief, the accused products when imported into the United States are classified under Chapter 85 of the 2008 Harmonized Tariff Schedule of the United States. AGNC believes that the unlawful importation occurs under one or more of the following subheadings: 9014.20.40, 9014,10.90, 9014.20.60, 9014.80.20, 9017.10.40, 9017.20.70, 9014.10.70, 8481.20.00, 8481.80.90, 8529.90.16, 8529.10.40, 8526.91.00, 8526.92.00, 8526.10.00 and 8517.62.00.<sup>2</sup> Exemplary brochures of these products are attached to this Complaint as Exhibits 26, 18, 19 and 27. Discovery likely will reveal additional products that infringe.

<sup>&</sup>lt;sup>2</sup> AGNC also incorporates the subheadings disclosed in Exhibit 40 and 41 to the extent they apply to marine autopilots.

## **B.** Proposed Navico Respondents

- 6.5 On information and belief, proposed Navico respondents' accused marine autopilots with a GPS or IMU directly (35 U.S.C. §271(a)) infringe and/or the accused marine autopilot indirectly infringe through the end user's combination with a GPS or IMU (35 U.S.C. §271(b) and (f)(1)) at least the following independent and dependent claims of the '976 Patent: claims 1, 2, 5, 10, 11, 12, 13, 28, 30, 54, 55 and 60.

  Discovery may reveal that proposed respondents infringe additional claims of the asserted patents. A representative claim charts applying independent claims 1 and 10 to the B&G H3000 and the Simrad AP24 are attached as Exhibits 48 and 49.
- 6.6 The proposed Navico respondents' use, sale, offer for sale and/or importation of the accused marine autopilots and related equipment (e.g., GPS, Chartplotter/GPS or IMU devices) directly infringe at least the foregoing claims of the '976 patent.
- 6.7 The proposed Navico respondents will be given notice of their infringement of the '976 patent by at least the service and filing of this Complaint. In addition, Navico was provided with notice of infringement on June 24, 2010. Exhibit 60. Further, on information and belief, the proposed Navico respondents knowingly induced end users to use the accused marine autopilots in an infringing manner, thereby inducing infringement of at least the foregoing claims of the '976 patent.
- 6.8 On information and belief, the accused products are manufactured at least in Norway and the United Kingdom by or for proposed respondents and imported into the United States, sold for importation, and/or sold within the United States after importation by the proposed Navico respondents. Exhibit 61. On information and belief, the accused

products include at least the following products: B&G H3000, SimRad-Yachting AP24, Simrad-Yachting AP28 and SimRad-Yachting AP50. On information and belief, Navico also manufactures, sells and imports, chartplotters designed for use with the accused products, including but not limited to the NSE8, NSA-12, GB40, NX40 Navstation, NX45 Navstation. On information and belief, the accused products when imported into the United States are classified under Chapter 85 of the 2008 Harmonized Tariff Schedule of the United States. AGNC believes that the unlawful importation occurs under one or more of the following subheadings: 9014.20.40, 9014,10.90, 9014.20.60, 9014.80.20, 9017.10.40, 9017.20.70, 9014.10.70, 8481.20.00, 8481.80.90, 8529.90.16, 8529.10.40, 8526.91.00, 8526.92.00, 8526.10.00 and 8517.62.00.³ Exemplary brochures of these products are attached to this Complaint as Exhibits 28(a), 28(b), 29, 30, 31, 32, 33, 34 & 35. Discovery likely will reveal additional products that infringe.

## C. Proposed Raymarine respondents

6.9 On information and belief, proposed Raymarine respondents' accused marine autopilots with a GPS or IMU directly (35 U.S.C. §271(a)) infringe and/or the accused marine autopilot indirectly infringe through the end user's combination with a GPS or IMU (35 U.S.C. §271(b) and (f)(1)) at least the following independent and dependent claims of the '976 Patent: claims 1, 2, 5, 10, 11, 12, 13, 28, 30, 54, 55 and 60. Discovery may reveal that proposed respondents infringe additional claims of the asserted patents. A representative claim charts applying independent claims 1 and 10 to the Raymarine autopilot is attached as Exhibit 52.

<sup>&</sup>lt;sup>3</sup> AGNC also incorporates the subheadings disclosed in Exhibit 40 and 41 to the extent they apply to marine autopilots.

- 6.10 The proposed Raymarine respondents' use, sale, offer for sale and/or importation of the accused marine autopilots and related equipment (e.g., GPS or Chartplotter/GPS) directly infringe at least the foregoing claims of the '976 patent.
- 6.11 The proposed Raymarine respondents will be given notice of their infringement of the '976 patent by at least the service and filing of this Complaint. In addition, Raymarine was provided with notice of infringement on June 24, 2010. CONFIDENTIAL Exhibit 60. Further, on information and belief, the proposed Raymarine respondents knowingly induced end users to use the accused marine autopilots in an infringing manner, thereby inducing infringement of at least the foregoing claims of the '976 patent.
- 6.12 On information and belief, the accused products are manufactured at least in Hungary by or for proposed respondents and imported into the United States, sold for importation, sold within the United States after importation by the proposed Raymarine respondents. Exhibit 61. On information and belief, the accused products include at least the following products: Raymarine SmartPilot. On information and belief, Raymarine, manufactures, sells and imports chartplotter/GPS for use with the accused products, including, but not limited to the A-series, C-series, E-series and G-series. On information and belief, the accused products when imported into the United States are classified under Chapter 85 of the 2008 Harmonized Tariff Schedule of the United States. AGNC believes that the unlawful importation occurs under one or more of the following subheadings: 9014.20.40, 9014,10.90, 9014.20.60, 9014.80.20, 9017.10.40, 9017.20.70, 9014.10.70, 8481.20.00, 8481.80.90, 8529.90.16, 8529.10.40, 8526.91.00, 8526.92.00,

8526.10.00 and 8517.62.00.<sup>4</sup> Exemplary brochures of these products are attached to this Complaint as Exhibits 36 and 37. Discovery likely will reveal additional products that infringe.

## VII. SPECIFIC INSTANCES OF UNFAIR IPORTATION AND SALE

- A. Proposed Furuno respondents
- 7.1 On information and belief, Furuno manufactures infringing marine autopilots in Japan. See Exhibit 4. On information and belief, the proposed Furuno respondents and others import those accused products in the United States for sale, sell those accused products for importation, and/or sell those accused products after importation. See Exhibits 5, 6 and 7.
- 7.2 The following instances are representative examples of specific instances of unfair importation and sale.

<sup>&</sup>lt;sup>4</sup> AGNC also incorporates the subheadings disclosed in Exhibit 40 and 41 to the extent they apply to marine autopilots.

#### Furuno Dealer Locator

The Dealer Locator below is for finding Authorized Furuno Dealers in the United States and Canada. For a listing of U.S Territories and Caribbean dealers, please click here.

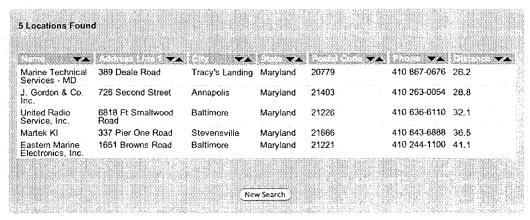


Exhibit 7.

- 7.4 A search of Google identifies multiple U.S. on-line retailers offering for sale the accused products. Exhibit 32. One such retailer is Alcom Marine Electronics, 711 West 17<sup>th</sup> Street, Unit C-12, Costa Mesa, California which sells Furuno, B&G, Simrad and Raymarine autopilots. Exhibit 39.
- 7.5 PIERS maintains a comprehensive database of import and export information of the cargoes moving through ports in the United States, Asia and Latin America. A search performed on the PIERS database shows regular shipments of marine autopilots from Japan to the United States See Exhibit 40 and 41.
- 7.6 Further discovery likely will reveal additional specific acts of the proposed Furuno respondents' importation of the accused products into the United States, sale for importation and sale after importation.
- 7.8 As set forth in the declaration of Barry Horvick, Marine Technical Services is an authorized dealer of Furuno, B&G, Simrad and Raymarine. Exhibit 61.

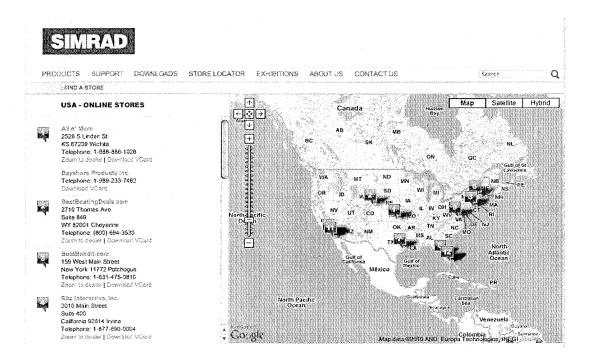
As confirmed, by MTS the Furuno – NavPilot 500 is made overseas and has been imported into the United States and installed in systems with GPS or IMU. Exhibit 61.

## B. Proposed Navico respondents

- 7.9 On information and belief, Navico manufactures infringing marine autopilots in Norway and the UK. See Exhibits 8, 9, 45, 46 & 47. On information and belief, the proposed Navico respondents and others import those accused products in the United States for sale, sell those accused products for importation, and/or sell those accused products after importation. See Exhibits 10, 11 and 12.
- 7.10 The following instances are representative examples of specific instances of unfair importation and sale
- 7.11 <u>www.bandg.com</u> identifies Navico Inc. as the distributor for its products.

  A search of Google identifies a number of retailers in the U.S. offering the accused B&G

  H3000 autopilot for sale, including WMJ Marine in San Diego California. Exhibit 43.
- 7.12 <a href="http://www.simrad-yachting.us/Store-locator/#http://www.simrad-yachting.us/Store-locator/Online-Stores/USA/">http://www.simrad-yachting.us/Store-locator/Online-Stores/USA/</a> provides a listing of U.S. stores selling SimRad Yachting products.



#### Exhibit 12.

- 7.13 A search of Google identifies multiple U.S. on-line retailers offering for sale the accused products. Exhibit 44. One such retailer is Alcom Marine Electronics, 711 West 17<sup>th</sup> Street, Unit C-12, Costa Mesa, California which sells Furuno, B&G, Simrad and Raymarine autopilots. Exhibit 39.
- 7.14 Further discovery likely will reveal additional specific acts of the proposed Navico respondents' importation of the accused products into the United States, sale for importation and sale after importation.
- 7.15 As set forth in the declaration of Barry Horvick, Marine Technical Services is an authorized dealer of Furuno, B&G, Simrad and Raymarine. Exhibit 61.

  As confirmed, by MTS the B&G H3000 and Simrad Ap24 is made overseas and has been imported into the United States and installed in systems with GPS or IMU. Exhibit 61.

## C. Proposed Raymarine respondents

- 7.16 On information and belief, Raymarine manufactures infringing marine autopilots in Hungary. See Exhibit 16. On information and belief, the proposed Raymarine respondents and others import those accused products in the United States for sale, sell those accused products for importation, and/or sell those accused products after importation. See Exhibits 14, 15, 50 and 51.
- 7.17 The following instances are representative examples of specific instances of unfair importation and sale
- 7.18 <a href="http://www.raymarine.com/locator.aspx?site=1&section=4&page=10">http://www.raymarine.com/locator.aspx?site=1&section=4&page=10</a> identifies dealers in the U.S. that sell Raymarine products. Exhibit 51.
- 7.19 <a href="http://www.raymarine.com/default.aspx?site=1&section=4&page=1809">http://www.raymarine.com/default.aspx?site=1&section=4&page=1809</a>
  identifies on-line retailer that sell Raymarine products. Exhibit 15. One such retailer is Alcom Marine Electronics, 711 West 17<sup>th</sup> Street, Unit C-12, Costa Mesa, California which sells Furuno, B&G, Simrad and Raymarine autopilots. Exhibit 39.
- 7.20 Further discovery likely will reveal additional specific acts of the proposed Raymarine respondents' importation of the accused products into the United States, sale for importation and sale after importation.
- 7.21 As set forth in the declaration of Barry Horvick, Marine Technical Services is an authorized dealer of Furuno, B&G, Simrad and Raymarine. Exhibit 61.

  As confirmed, by MTS the Raymarine Smartpilot is made overseas and has been imported into the United States and installed in systems with GPS or IMU. Exhibit 61.

## IIX. LICENSE

8.1 There are no licenses under the '976 Patent.

#### IX. DOMESTIC INDUSTRY

9.1 A domestic industry, as defined by 19 U.S.C. § 1337(a)(3(A), (B) and (C), exists with respect to the Complainant's activities in the United States related to articles protected by the '976 patent by reasons of Complainant's (a) significant investment in plant and equipment, (b) significant employment of labor and capital and (c) substantial investment in the exploitation of the '976 patent, such as substantial engineering activities, patent procurement, licensing efforts, and R&D activities. AGNC is an American company founded in 1986. Since its inception AGNC has had one facility located in the United States, currently at 888 Easy Street, Simi Valley, California. In this facility, AGNC conducts all of its work including research and development, consultation, manufacturing, product sales, sales support, licensing and operations. AGNC purchases parts and supplies from the United States and manufactures all products in-house in its one facility. As explained below, Complainant currently makes and/or offer for sales products that utilize the '976 patent in whole or in part when implemented by end users such as the United States Navy. See Exhibits 54(a), 54(b), 58 and 60.

## A. <u>Technical Prong</u>

9.1 As required by Section 337(a)(2) and defined by section 337(a)(3), an industry in the United States exists in connection with articles protected by the '976 Patent. AGNC's products that are covered in whole or in part by at least claims 1, 2, 5, 10, 11, 12, 13, 28, 30, 54 and 55 the '976 patent include at least the following exemplary products: AGNC's Coremicro Pointing and Stabilizing Mechanism, Exhbit 54(a), (coremicro® PS) AGNC's Universal Navigation and Control Unit 1 (UNCUN1), Exhibits 54(b) and 57, AGNC's Palm Navigator Products, Exhibits 55 and 56, and

coremicro® AHRS/INS/GPS Integration Unit (AGNC-coremicro-AINSGPS), Exhibit 60. Representative claim charts applying claims 2 and 10 of the '976 patent is attached as Exhibit 58.

- 9.2 A domestic industry exists through substantial investment in the '976

  Patent through the research and development and licensing efforts made by AGNC . See Exhibit 60.
  - B. Economic Prong
- 9.3 AGNC conducts significant domestic industry activities in the United States relating to its domestic industry products. Because AGNC's Universal Navigation and Control Unit 1 (UNCUN1) and Coremicro® Pointing and Stabilizing Mechanism (AGNC-coremicro-PS), coremicro® AHRS/INS/GPS Integration Unit (AGNC-coremicro-AINSGPS) products are covered in whole or in part by at least one claim of the '976 Patent, the following investment information shows the existence of a domestic industry. CONFIDENTIAL EXHIBITS 59 and 60.
- 9.3 AGNC's domestic industry activities include AGNC's significant investment in plant and equipment, significant employment of labor and capital and substantial investment in engineering and R&D. AGNC continues to conduct many activities in the United States relating to the UNCUN1, AGNC-coremicro-PS and AGNC-coremicro-AINSGPSproducts. CONFIDENTIAL EXHIBITS 59 and 60.

## XI. RELATED LITIGATION

10.1 There are no related litigations pending or previously filed relating to the '976 patent in the United States or oversees.

## XII. REQUESTED RELIEF

- 11.1 WHEREFORE, by reason of the foregoing, Complainant requests that the United States International Trade Commission:
- (a) Institute and immediate Investigation, pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, into the unlawful importation into the United States the sale for importation, and/or sale within the United States after importation by the proposed respondents and others of marine autopilot and components thereof that infringe one or more claims of United States Patent No. 6,596,976;
  - (b) Determine that there has been a violation of Section 337;
- (c) Issue a permanent general exclusion order, pursuant to Section 337(d) of the Tariff Act of 1930, as amended, excluding from entry into the United States all marine autopilots and components thereof that infringe one or more claims of United States Patent No. 6,596,976;
- (d) In the alternative, issue a permanent limited exclusion order, pursuant to Section 337(d) of the Tariff Act of 1930, as amended, excluding from entry into the United States all marine autopilots and components thereof that are manufactured, imported, or sold by or on behalf of the proposed respondents, their affiliates, subsidiaries, successors, or assigns, and components thereof, that infringe one or more claims of United States Patent No. 6,596,976;
- (e) Issue permanent cease and desist orders, pursuant to Section 337(f) of the Tariff Act of 1930, as amended, directing each proposed respondent, its affiliates, subsidiaries, successors, or assigns, from marketing, demonstrating, distributing, offering for sale, selling, or otherwise transferring, including the movement or shipment of

inventory, in the United States, or transferring outside the United States for sale in the United States all marine autopilots and components thereof that infringe one or more claims of United States Patent No. 6,596,976; and

(f) Issue such further relief as the Commission deems just and proper based on the facts determined by the Investigation and the authority of the Commission.

Respectfully submitted,

The Fuisz Law Firm

Dated 8/25/10

John R. Fuisz

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Counsel for American GNC

#### **VERIFICATION**

I, Tasso Politopoulos Ph.D., declare, in accordance with 19 C.F.R. §§ 210.4 and 210.12(a), under penalty of perjury, that the following are true:

- 1. I, Tasso Politopoulos Ph.D. am the Chief Scientist at American GNC and am duly authorized to sign this Complaint on behalf of American GNC;
  - 2. I have read the foregoing Complaint;
- 3. To the best of my knowledge, information, and belief, based upon reasonable inquiry, the foregoing Complaint is well-founded in fact and is warranted by existing law or by a nonfrivolous argument for the extension, modification, or reversal of existing law or the establishment of new law;
- 4. The allegations or other factual contentions have either evidentiary support or are likely to have evidentiary support after a reasonable opportunity for further investigation or discovery, and;
- 5. The foregoing Complaint is not being filed for any improper purpose, such as to harass or cause unnecessary delay or needless increase in the cost of litigation.

Executed this 25 of August