

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FLIR SYSTEMS, INC. and
FLIR MARITIME US, INC. (F/K/A RAYMARINE, INC.),

Petitioner

v.

GARMIN SWITZERLAND GmbH,

Patent Owner

Case IPR2017-00946

Patent 7,268,703 B1

DECLARATION OF CAPTAIN STEVEN BROWNE

TABLE OF CONTENTS

I. INTRODUCTION	3
II. QUALIFICATIONS.....	4
III. LEGAL FRAMEWORK.....	12
IV. OPINION	13
A. Level of a Person Having Ordinary Skill in the Art	13
B. Opinions Regarding Claim Construction	16
1. “Course”	16
2. “Navigation”	24
C. Opinions Regarding de Jong	28
1. Summary of de Jong	28
2. Opinions Regarding de Jong Teaching “re-routing the course”	36
3. Opinions Regarding de Jong Teaching “Avoiding the Preselected Conditions”	40
4. Opinions Regarding de Jong Teaching Routing or Re-Routing a “Course”	47

I, Steven Browne, hereby declare the following:

I. INTRODUCTION

1. I, Steven Browne, have been retained by counsel for Garmin Switzerland GmbH (“Garmin”) as a technical expert in the above-captioned case. Specifically, I have been asked to render certain opinions in regards to the Patent Owner Response with respect to U.S. Patent No. 7,268,703 B1 (“the ’703 Patent”) in response to the IPR Petition submitted by FLIR Systems, Inc. and FLIR Maritime US, Inc. (f/k/a Raymarine, Inc) (“FLIR”). I understand that the Challenged Claims are claims 1-7, 12-23, 25-29, and 41-45. My opinions are limited to those Challenged Claims.

2. In reaching my opinions in this matter, I have reviewed the following materials:

- Petition For *Inter Partes* Review of U.S. Patent No. 7,268,703 (Paper 1)
- U.S. Patent No. 7,268,703 (EX_1001)
- Declaration of Dr. Michael S. Braasch (EX_1003)
- W.J. de Jong, Automated Route Planning – A Network-Based Route Planning Solution for Marine Navigation, University of Nottingham (December 2001) (“de Jong”) (EX_1005)
- Tetley et al., Electronic Navigation Systems, 3d Ed. (Butterworth-Heinemann 2001) (“Tetley”) (excerpts) (EX_1006)

- Patent Owner’s Preliminary Response to Petition For *Inter Partes* Review (Paper 6)
- Decision - Institution of *Inter Partes* Review (Paper 7)
- *Bowditch*, The American Practical Navigator; EX_1018 and EX_2001 (selected portions cited herein)

3. I am being compensated at a rate of \$200/hour for each hour of service related to preparation, review, and analysis, and at a rate of \$300/hour for each hour of service related to deposition preparation or taking of a deposition. My compensation does not depend in any way on the content of my testimony and is not affected by the outcome of the case. If called to testify as to the contents of this report, I can and would testify truthfully and competently.

II. QUALIFICATIONS

4. My qualifications to testify about the patent-in-suit, relevant technology, and the prior art are set forth in my curriculum vitae (“CV”), which is attached hereto as Appendix 1. My CV includes my educational background and work history.

5. I have over thirty years of professional experience in the field of marine navigation as an officer in the US Navy and in the US Merchant Marine, including almost 20 years in maritime education. I have served as an expert

witness in a previous admiralty law case in a matter involving a collision at sea between vessels.

6. I hold a merchant mariner credential as Master Mariner issued by the United States Coast Guard. With that credential I am qualified to serve as Master (often called “captain”) of vessels of unlimited tonnage upon the oceans and connected waterways. That credential meets the international Standards of Training, Certification and Watchkeeping for Seafarers (STCW).

7. I have been working as a professional mariner for more than 30 years. As an officer in the US Navy, I navigated two submarines, a frigate, a destroyer, a cruiser and a helicopter carrier. While aboard those vessels, I served for 8 to 10 hours each day at sea as a navigation watch officer (Officer of the Deck), responsible for overseeing the safe navigation of the ship. As a civilian in the US Merchant Marine, I have worked on passenger ships and a maritime academy training ship, serving as an Officer in Charge of a Navigation Watch (OICNW), standing two navigation watches per day on the navigation bridge. I have served as Navigation Officer (Second Mate) aboard three ships. In this position, my primary responsibility was navigation planning and execution. This involved acquiring and updating charts and publications, creating voyage plans, and maintaining bridge equipment. I also served as Master of MV *Doulos*, a 6,800-ton passenger vessel flagged in Malta. As the ship’s captain, it was my responsibility to give voyage

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