2020

ANNUAL Awards

NSWC PANAMA CITY DIVISION

Ensuring Warfighting Dominance in the Littoral Battlespace

NAVSEA
WARFARE CENTERS
Panama City

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Master of Ceremonies

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Patent Awards

Annual Awards Presentation

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JOIN LIVE!
PCDlive + Facebook + YouTube
Livestream link will be sent via Navy email

LIVESTREAM

Despite the COVID-19 pandemic, the 2020 Annual Awards is held virtually to recognize the efforts and accomplishments of our workforce, and congratulate our 2020 Annual Award recipients. Due to COVID guidelines and social distancing, photos were digitally composited.

The livestream will be available on PCDlive, Facebook, and YouTube. Links will be sent out via email for all platforms.

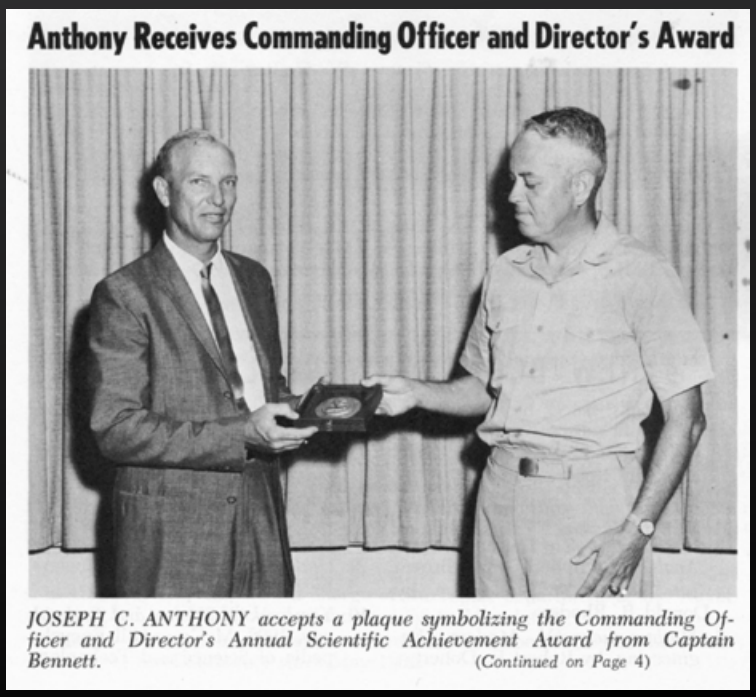
Visit the Wiki page for updated information:
wiki.navsea.navy.mil/display/pcd103/awards

The video will be streaming and premiering at the same time on all platforms.

facebook.com/nswcpcd

youtube.com/nswcpcdpao

About



Anthony Receives Commanding Officer and Director's Award

JOSEPH C. ANTHONY accepts a plaque symbolizing the Commanding Officer and Director's Annual Scientific Achievement Award from Captain Bennett.

(Continued on Page 4)

1963(13 Sep): Awards Group
(L to R): Unknown, Billie Boyette, Jimmy Roach, Eugene White, Olin Prichar

The NSWC PCD Annual Awards, also known as the Commanding Officer and Technical Director (CO/TD) Awards, is a prestigious event that provides the Command with the opportunity to showcase and acknowledge the great work accomplished by our civilian employees here at NSWC PCD. This event highlights achievements and provides knowledge about future initiatives. This event has been held for many years with hundreds of recipients.

Each year, individuals are selected amongst a highly competitive pool of nominees. The accomplishments, accolades, and the great work of our people here at NSWC PCD are too numerous to count. For that, the CO/TD say "thank you" to all.

Each year, one individual is inducted into the NSWC PCD Hall of Fame. The employee must have been a retiree from NSWC PCD for a minimum of five years.

Congratulations to this year's winners!

Nomination and Selection

Applicability: Any civilian or military employee may submit a nomination to be reviewed by the nominee's chain of command.

Procedures: Nominators use the Awards Nomination Form found on the Awards Wiki site: wiki.navsea.navy.mil/display/PCD103/Awards.

All entries on the nomination forms must be completed. The nomination should contain specific examples or a description of the individual's or team's performance or achievement in relation to the award criteria.

All nominations should be submitted through the nominee's chain of command. Upon approval from the chain of command, the nominations should be forwarded to the Awards Program Coordinator.

The CO/TD Award final selections are made by the Commanding Officer and Technical Director, based on recommendations from an evaluation panel consisting of a mix of representatives, including the Department Heads, Deputy Department Heads, and other personnel.

CAPT David Back, USN
Commanding Officer

Dr. Peter Adair, SES
Technical Director

HOW TO NOMINATE

Annual Awards nomination calls typically run the month of November and are selected mid-December. The process is easy. Simply fill out the application form and submit to your supervisor for approval. Your supervisor will process the application up the chain. That's it!

Mark your calendars to nominate an outstanding colleague or team in 2021!
We are proud of the work that is accomplished here at NSWC PCD and we want to recognize YOU!

For details regarding nominations, visit:
wiki.navsea.navy.mil/display/pcd103/awards

Patents

THE 2020 PATENTS OF NSWC PCD PERSONNEL
AND THE INDUCTION OF NEW MEMBERS TO
THE INVENTOR'S SOCIETY

About

Calvin B. Koesy, Head of the Electronic-Electrical Branch, looks properly pleased as he accepts a check for $150.00 (less taxes) from Captain Miller. Koesy's award was based on allowance of his patent "Equipment for Locating and Plotting the Position of Underwater Towed Vehicles."

The Technical Director's Office was the scene of an informal award presentation ceremony recently at which Code 700 employees received four patent awards and one beneficial suggestion award. Dr. Jasper, (third from left) presented the award checks to: Willis A. Teel (left) who received a $50 award based on a letter of authorization for patent disclosure entitled, "Wide-Band, High Power, Underwater Sound Transducer for Hemispherical Transmission and Reception of Sound"; James L. Kirkland (second from left), a check for $25 for his beneficial suggestion to install reliable 3-control electrical receptacles; Joseph E. Blue (third from right), a $50 check for a letter of authorization for his patent disclosure entitled, "Time Interval to Pulse Height Converter"; Henry L. Warner (second from right), for his letter of authorization for patent disclosure entitled, "Method of Deriving Signal Amplitude From Coincidence Information," an award check of $50; and Francis J. Murphree (extreme right), $50 award for authorization of patent application for his patent disclosure entitled "Mapping System."

IT PAYS TO PATENT!

Patenting your inventions can be rewarding.

- $400 for submitting a complete invention disclosure to the Legal Office
- $300 for the filing of a patent application with the U.S. Patent and Trademark Office
- $500 for the issuance of a patent from the U.S. Patent and Trademark Office
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850-235-5169

METHODS AND SYSTEMS FOR AUTOMATED MISSION AREA SEGMENTATION

(12) **United States Patent**
Hyland et al.

(10) **Patent No.: US 10,520,600 B1**
(45) **Date of Patent: Dec. 31, 2019**

(54) **METHODS AND SYSTEMS FOR AUTOMATED MISSION AREA SEGMENTATION**

(71) Applicants: **John C. Hyland**, Panama City, FL (US); **Cheryl Smith**, Panama City, FL (US)

(72) Inventors: **John C. Hyland**, Panama City, FL (US); **Cheryl Smith**, Panama City, FL (US)

(73) Assignee: **United States of America as represented by the Secretary of the Navy**, Washington, DC (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 413 days.

(21) Appl. No.: **15/467,702**

(22) Filed: **Mar. 23, 2017**

(51) **Int. Cl.**
G01S 15/89 (2006.01)

(52) **U.S. Cl.**
CPC ***G01S 15/89*** (2013.01)

(58) **Field of Classification Search**
CPC G01S 15/89; G01S 15/88; G01V 1/00; G01V 1/302; G01V 1/345; G01V 1/38
See application file for complete search history.

(56) **References Cited**

PUBLICATIONS

Kamgar-Parsi et al., Underwater Imaging with a Moving Acoustic Lens, Jan. 1998, IEEE Transactions on Image Processing, vol. 7, No. 1, pp. 91-99 (Year: 1998).*

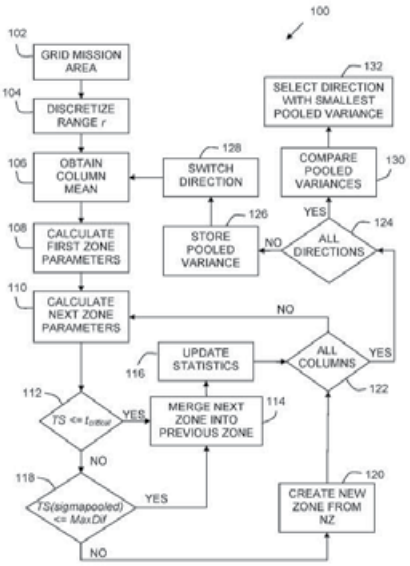
* cited by examiner

Primary Examiner — Toan M Le
(74) *Attorney, Agent, or Firm* — James T. Shepherd

(57) **ABSTRACT**

Methods for segmenting an ocean bottom area into multiple homogenous, rectangular sub-mission areas and generating new, composite sensor performance functions for each sub-mission area are provided. The method discretizes each voxel into a plurality of equally sized, square range bins and obtains a mean P-of-Y curve for each row and column based on a bottom characterization for each of the voxels. Zone parameters along each direction are iteratively calculated, with adjacent zones merged when their parameters are within predetermined values. Pooled variances are calculated for each direction and a preferred mission direction is chosen based on the direction with the smallest pooled variance.

14 Claims, 2 Drawing Sheets



INVENTORS

JOHN HYLAND
CHERYL SMITH

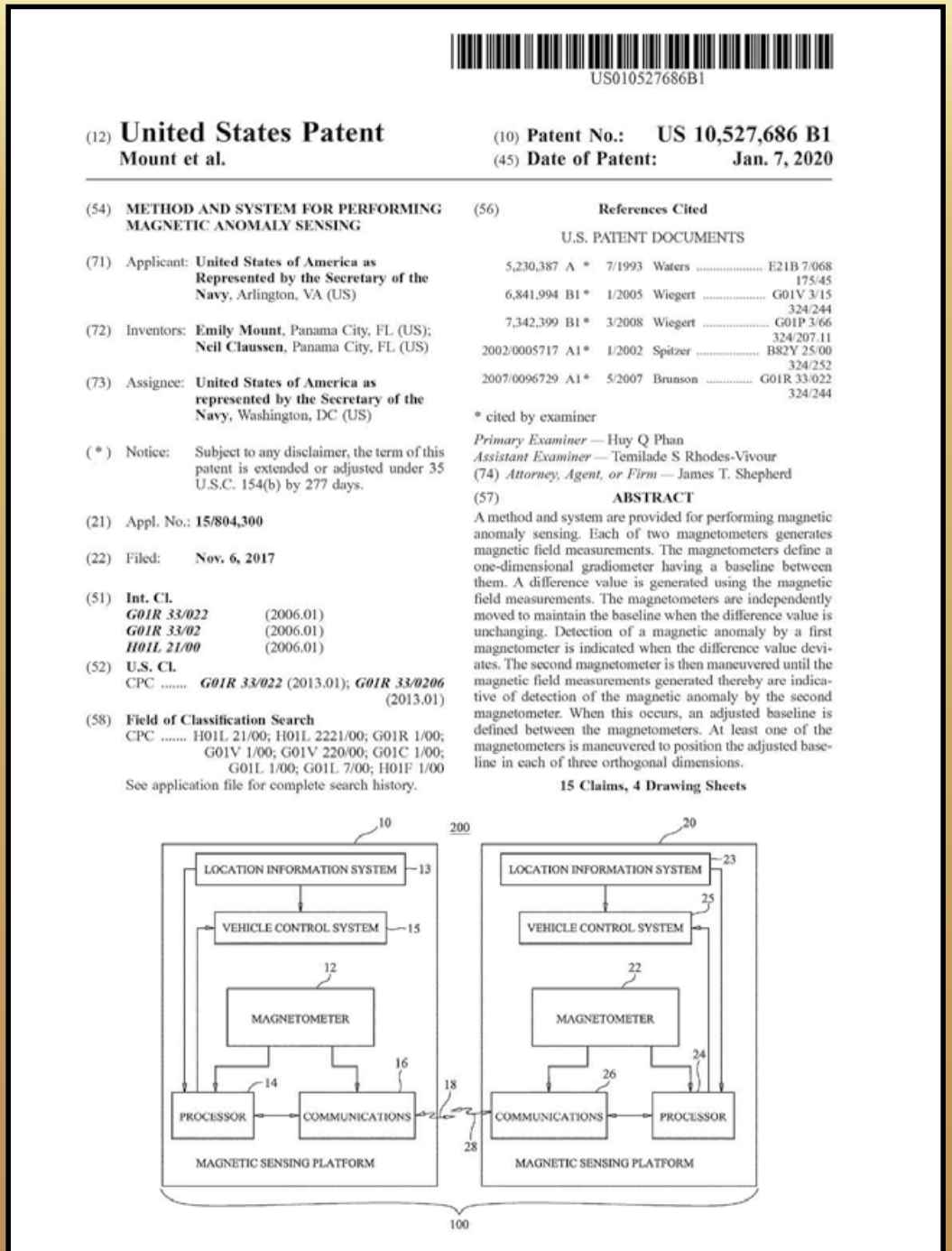
PATENT NUMBER

10,520,600

PATENT DATE

12/31/2019

METHOD AND SYSTEM FOR PERFORMING MAGNETIC ANOMALY SENSING



US010527686B1

(12) **United States Patent**
Mount et al.

(10) **Patent No.: US 10,527,686 B1**
(45) **Date of Patent: Jan. 7, 2020**

(54) **METHOD AND SYSTEM FOR PERFORMING MAGNETIC ANOMALY SENSING**

(71) Applicant: **United States of America as Represented by the Secretary of the Navy**, Arlington, VA (US)

(72) Inventors: **Emily Mount**, Panama City, FL (US); **Neil Claussen**, Panama City, FL (US)

(73) Assignee: **United States of America as represented by the Secretary of the Navy**, Washington, DC (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 277 days.

(21) Appl. No.: **15/804,300**

(22) Filed: **Nov. 6, 2017**

(51) **Int. Cl.**
G01R 33/022 (2006.01)
G01R 33/02 (2006.01)
H01L 21/00 (2006.01)

(52) **U.S. Cl.**
CPC ***G01R 33/022*** (2013.01); ***G01R 33/0206*** (2013.01)

(58) **Field of Classification Search**
CPC H01L 21/00; H01L 2221/00; G01R 1/00; G01V 1/00; G01V 220/00; G01C 1/00; G01L 1/00; G01L 7/00; H01F 1/00
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,230,387	A *	7/1993	Waters	E21B 7/068 175/45
6,841,994	B1 *	1/2005	Wiegert	G01V 3/15 324/244
7,342,399	B1 *	3/2008	Wiegert	G01P 3/66 324/207.11
2002/0005717	A1 *	1/2002	Spitzer	B82Y 25/00 324/252
2007/0096729	A1 *	5/2007	Brunson	G01R 33/022 324/244

* cited by examiner

Primary Examiner — Huy Q Phan
Assistant Examiner — Temilade S Rhodes-Vivour
(74) *Attorney, Agent, or Firm* — James T. Shepherd

(57) **ABSTRACT**

A method and system are provided for performing magnetic anomaly sensing. Each of two magnetometers generates magnetic field measurements. The magnetometers define a one-dimensional gradiometer having a baseline between them. A difference value is generated using the magnetic field measurements. The magnetometers are independently moved to maintain the baseline when the difference value is unchanging. Detection of a magnetic anomaly by a first magnetometer is indicated when the difference value deviates. The second magnetometer is then maneuvered until the magnetic field measurements generated thereby are indicative of detection of the magnetic anomaly by the second magnetometer. When this occurs, an adjusted baseline is defined between the magnetometers. At least one of the magnetometers is maneuvered to position the adjusted baseline in each of three orthogonal dimensions.

15 Claims, 4 Drawing Sheets

INVENTORS

EMILY MOUNT
NEIL CLAUSSEN

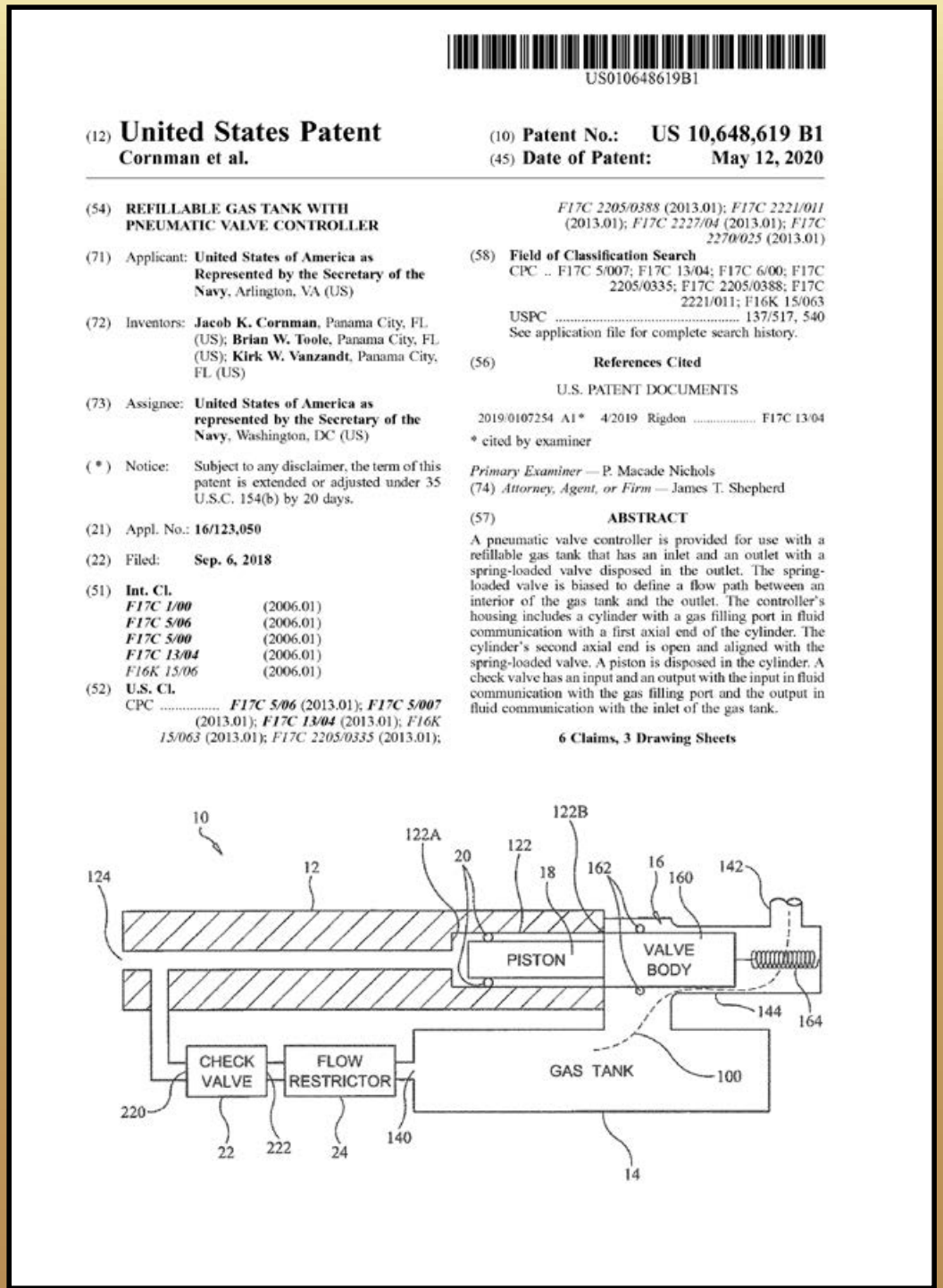
PATENT NUMBER

10,527,686

PATENT DATE

1/7/2020

REFILLABLE GAS TANK WITH PNEUMATIC VALVE CONTROLLER



US010648619B1

(12) **United States Patent**
Cornman et al.

(10) **Patent No.: US 10,648,619 B1**
(45) **Date of Patent: May 12, 2020**

(54) **REFILLABLE GAS TANK WITH PNEUMATIC VALVE CONTROLLER**

(71) Applicant: **United States of America as Represented by the Secretary of the Navy**, Arlington, VA (US)

(72) Inventors: **Jacob K. Cornman**, Panama City, FL (US); **Brian W. Toole**, Panama City, FL (US); **Kirk W. Vanzandt**, Panama City, FL (US)

(73) Assignee: **United States of America as represented by the Secretary of the Navy**, Washington, DC (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 20 days.

(21) Appl. No.: **16/123,050**

(22) Filed: **Sep. 6, 2018**

(51) **Int. Cl.**

F17C 1/00	(2006.01)
F17C 5/06	(2006.01)
F17C 5/00	(2006.01)
F17C 13/04	(2006.01)
F16K 15/06	(2006.01)

(52) **U.S. Cl.**
CPC ***F17C 5/06*** (2013.01); ***F17C 5/007*** (2013.01); ***F17C 13/04*** (2013.01); *F16K 15/063* (2013.01); *F17C 2205/0335* (2013.01); *F17C 2205/0388* (2013.01); *F17C 2221/011* (2013.01); *F17C 2227/04* (2013.01); *F17C 2270/025* (2013.01)

(58) **Field of Classification Search**
CPC .. F17C 5/007; F17C 13/04; F17C 6/00; F17C 2205/0335; F17C 2205/0388; F17C 2221/011; F16K 15/063
USPC 137/517, 540
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2019/0107254 A1* 4/2019 Rigdon F17C 13/04

* cited by examiner

Primary Examiner — P. Macade Nichols
(74) *Attorney, Agent, or Firm* — James T. Shepherd

(57) **ABSTRACT**

A pneumatic valve controller is provided for use with a refillable gas tank that has an inlet and an outlet with a spring-loaded valve disposed in the outlet. The spring-loaded valve is biased to define a flow path between an interior of the gas tank and the outlet. The controller's housing includes a cylinder with a gas filling port in fluid communication with a first axial end of the cylinder. The cylinder's second axial end is open and aligned with the spring-loaded valve. A piston is disposed in the cylinder. A check valve has an input and an output with the input in fluid communication with the gas filling port and the output in fluid communication with the inlet of the gas tank.

6 Claims, 3 Drawing Sheets

INVENTORS

JACOB CORNMAN
BRIAN TOOLE*
KIRK VANZANDT

PATENT NUMBER

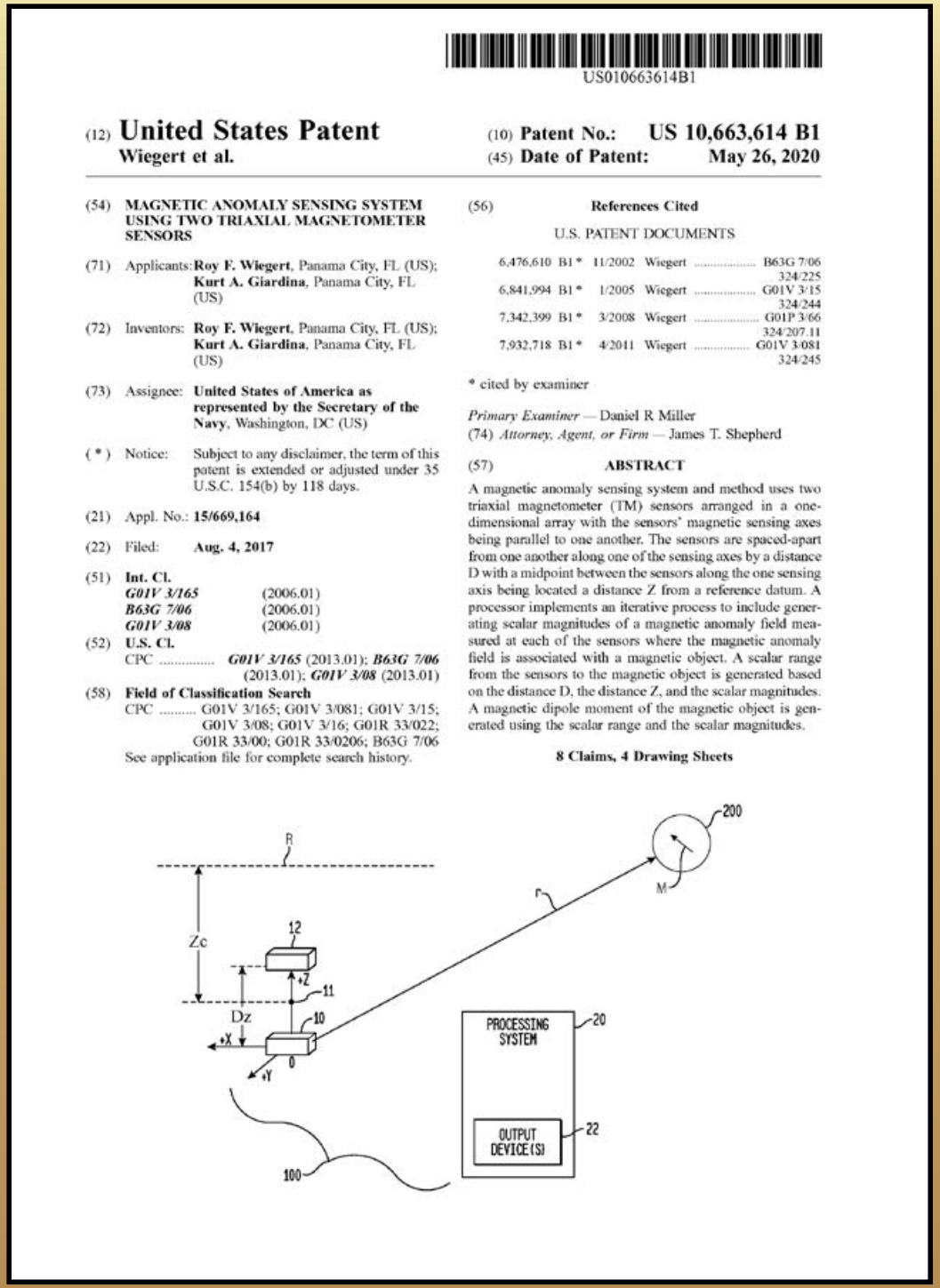
10,648,619

PATENT DATE

5/12/2020

* Indicates newly inducted into Inventor's Society

MAGNETIC ANOMALY SENSING SYSTEM USING TWO TRIAXIAL MAGNETOMETER SENSORS



US010663614B1

(12) **United States Patent**
Wiegert et al.

(10) **Patent No.: US 10,663,614 B1**
(45) **Date of Patent: May 26, 2020**

(54) **MAGNETIC ANOMALY SENSING SYSTEM USING TWO TRIAXIAL MAGNETOMETER SENSORS**

(71) Applicants: **Roy F. Wiegert**, Panama City, FL (US); **Kurt A. Giardina**, Panama City, FL (US)

(72) Inventors: **Roy F. Wiegert**, Panama City, FL (US); **Kurt A. Giardina**, Panama City, FL (US)

(73) Assignee: **United States of America as represented by the Secretary of the Navy**, Washington, DC (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 118 days.

(21) Appl. No.: **15/669,164**

(22) Filed: **Aug. 4, 2017**

(51) **Int. Cl.**
G01V 3/165 (2006.01)
B63G 7/06 (2006.01)
G01V 3/08 (2006.01)

(52) **U.S. Cl.**
CPC ***G01V 3/165*** (2013.01); ***B63G 7/06*** (2013.01); ***G01V 3/08*** (2013.01)

(58) **Field of Classification Search**
CPC G01V 3/165; G01V 3/081; G01V 3/15; G01V 3/08; G01V 3/16; G01R 33/022; G01R 33/00; G01R 33/0206; B63G 7/06
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,476,610	B1 *	11/2002	Wiegert	B63G 7/06 324/225
6,841,994	B1 *	1/2005	Wiegert	G01V 3/15 324/244
7,342,399	B1 *	3/2008	Wiegert	G01P 3/66 324/207.11
7,932,718	B1 *	4/2011	Wiegert	G01V 3/081 324/245

* cited by examiner

Primary Examiner — Daniel R Miller
(74) *Attorney, Agent, or Firm* — James T. Shepherd

(57) **ABSTRACT**

A magnetic anomaly sensing system and method uses two triaxial magnetometer (TM) sensors arranged in a one-dimensional array with the sensors' magnetic sensing axes being parallel to one another. The sensors are spaced-apart from one another along one of the sensing axes by a distance D with a midpoint between the sensors along the one sensing axis being located a distance Z from a reference datum. A processor implements an iterative process to include generating scalar magnitudes of a magnetic anomaly field measured at each of the sensors where the magnetic anomaly field is associated with a magnetic object. A scalar range from the sensors to the magnetic object is generated based on the distance D, the distance Z, and the scalar magnitudes. A magnetic dipole moment of the magnetic object is generated using the scalar range and the scalar magnitudes.

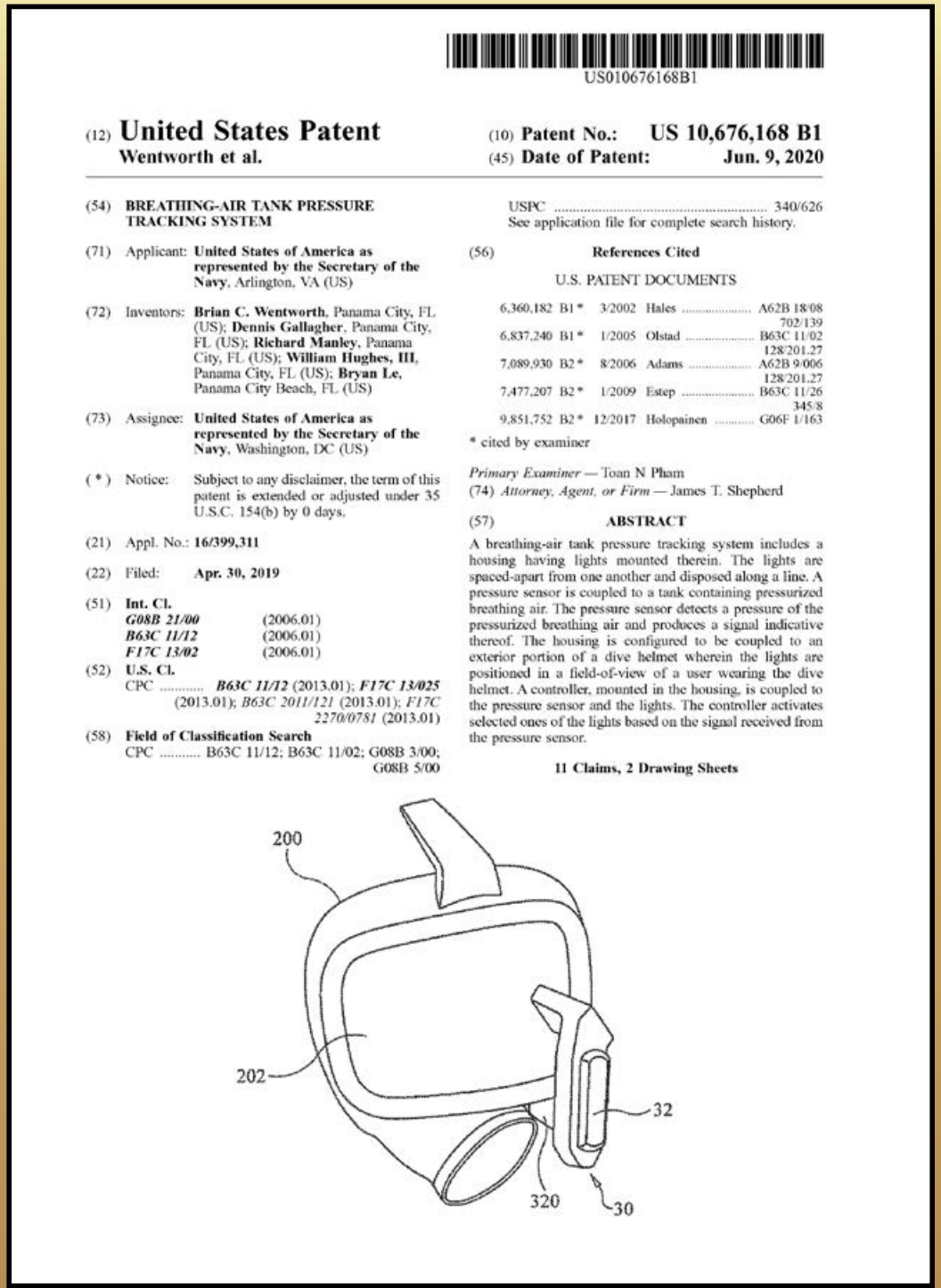
8 Claims, 4 Drawing Sheets

INVENTORS
ROY WIEGERT
KURT GIARDINA

PATENT NUMBER
10,663,614

PATENT DATE
5/26/2020

BREATHING-AIR TANK PRESSURE TRACKING SYSTEM



US010676168B1

(12) **United States Patent**
Wentworth et al.

(10) **Patent No.: US 10,676,168 B1**
(45) **Date of Patent: Jun. 9, 2020**

(54) **BREATHING-AIR TANK PRESSURE TRACKING SYSTEM**

(71) Applicant: **United States of America as represented by the Secretary of the Navy**, Arlington, VA (US)

(72) Inventors: **Brian C. Wentworth**, Panama City, FL (US); **Dennis Gallagher**, Panama City, FL (US); **Richard Manley**, Panama City, FL (US); **William Hughes, III**, Panama City, FL (US); **Bryan Le**, Panama City Beach, FL (US)

(73) Assignee: **United States of America as represented by the Secretary of the Navy**, Washington, DC (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **16/399,311**

(22) Filed: **Apr. 30, 2019**

(51) **Int. Cl.**
G08B 21/00 (2006.01)
B63C 11/12 (2006.01)
F17C 13/02 (2006.01)

(52) **U.S. Cl.**
CPC ***B63C 11/12*** (2013.01); ***F17C 13/025*** (2013.01); *B63C 2011/121* (2013.01); *F17C 2270/0781* (2013.01)

(58) **Field of Classification Search**
CPC B63C 11/12; B63C 11/02; G08B 3/00; G08B 5/00
USPC 340/626
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,360,182	B1 *	3/2002	Hales	A62B 18/08 702/139
6,837,240	B1 *	1/2005	Olstad	B63C 11/02 128/201.27
7,089,930	B2 *	8/2006	Adams	A62B 9/006 128/201.27
7,477,207	B2 *	1/2009	Estep	B63C 11/26 345/8
9,851,752	B2 *	12/2017	Holopainen	G06F 1/163

* cited by examiner

Primary Examiner — Toan N Pham
(74) *Attorney, Agent, or Firm* — James T. Shepherd

(57) **ABSTRACT**

A breathing-air tank pressure tracking system includes a housing having lights mounted therein. The lights are spaced-apart from one another and disposed along a line. A pressure sensor is coupled to a tank containing pressurized breathing air. The pressure sensor detects a pressure of the pressurized breathing air and produces a signal indicative thereof. The housing is configured to be coupled to an exterior portion of a dive helmet wherein the lights are positioned in a field-of-view of a user wearing the dive helmet. A controller, mounted in the housing, is coupled to the pressure sensor and the lights. The controller activates selected ones of the lights based on the signal received from the pressure sensor.

11 Claims, 2 Drawing Sheets

INVENTORS

BRIAN WENTWORTH*
DENNIS GALLAGHER
RICHARD MANLEY
WILLIAM HUGHES
BRYAN (TIEN) LE*

PATENT NUMBER

10,676,168

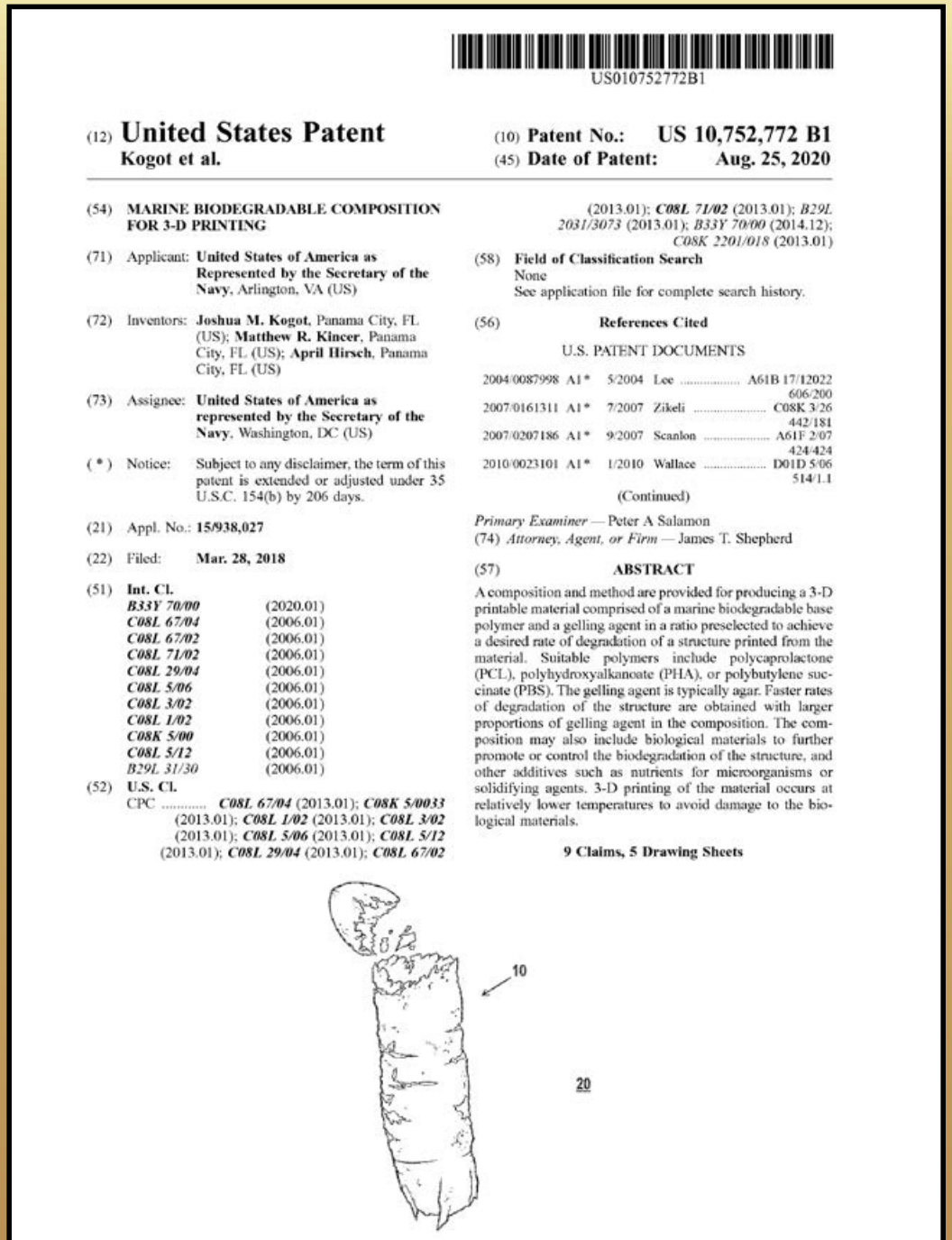
PATENT DATE

1/9/2020

* Indicates newly inducted into Inventor's Society

PATENTS

MARINE BIODEGRADABLE COMPOSITION FOR 3D PRINTING



US010752772B1

(12) **United States Patent**
Kogot et al.

(10) **Patent No.: US 10,752,772 B1**
(45) **Date of Patent: Aug. 25, 2020**

(54) **MARINE BIODEGRADABLE COMPOSITION FOR 3-D PRINTING**

(71) Applicant: **United States of America as Represented by the Secretary of the Navy**, Arlington, VA (US)

(72) Inventors: **Joshua M. Kogot**, Panama City, FL (US); **Matthew R. Kincer**, Panama City, FL (US); **April Hirsch**, Panama City, FL (US)

(73) Assignee: **United States of America as represented by the Secretary of the Navy**, Washington, DC (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 206 days.

(21) Appl. No.: **15/938,027**

(22) Filed: **Mar. 28, 2018**

(51) **Int. Cl.**

B33Y 70/00	(2020.01)
C08L 67/04	(2006.01)
C08L 67/02	(2006.01)
C08L 71/02	(2006.01)
C08L 29/04	(2006.01)
C08L 5/06	(2006.01)
C08L 3/02	(2006.01)
C08L 1/02	(2006.01)
C08K 5/00	(2006.01)
C08L 5/12	(2006.01)
B29L 31/30	(2006.01)

(52) **U.S. Cl.**
CPC ***C08L 67/04*** (2013.01); ***C08K 5/0033*** (2013.01); ***C08L 1/02*** (2013.01); ***C08L 3/02*** (2013.01); ***C08L 5/06*** (2013.01); ***C08L 5/12*** (2013.01); ***C08L 29/04*** (2013.01); ***C08L 67/02*** (2013.01); ***C08L 71/02*** (2013.01); *B29L 2031/3073* (2013.01); *B33Y 70/00* (2014.12); *C08K 2201/018* (2013.01)

(58) **Field of Classification Search**
None
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2004/0087998	A1*	5/2004	Lee	A61B 17/12022 606/200
2007/0161311	A1*	7/2007	Zikeli	C08K 3/26 442/181
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2010/0023101	A1*	1/2010	Wallace	D01D 5/06 514/1.1

(Continued)

Primary Examiner — Peter A Salamon
(74) *Attorney, Agent, or Firm* — James T. Shepherd

(57) **ABSTRACT**

A composition and method are provided for producing a 3-D printable material comprised of a marine biodegradable base polymer and a gelling agent in a ratio preselected to achieve a desired rate of degradation of a structure printed from the material. Suitable polymers include polycaprolactone (PCL), polyhydroxyalkanoate (PHA), or polybutylene succinate (PBS). The gelling agent is typically agar. Faster rates of degradation of the structure are obtained with larger proportions of gelling agent in the composition. The composition may also include biological materials to further promote or control the biodegradation of the structure, and other additives such as nutrients for microorganisms or solidifying agents. 3-D printing of the material occurs at relatively lower temperatures to avoid damage to the biological materials.

9 Claims, 5 Drawing Sheets

INVENTORS

JOSHUA KOGOT*
MATTHEW KINCER*
APRIL HIRSCH*

PATENT NUMBER

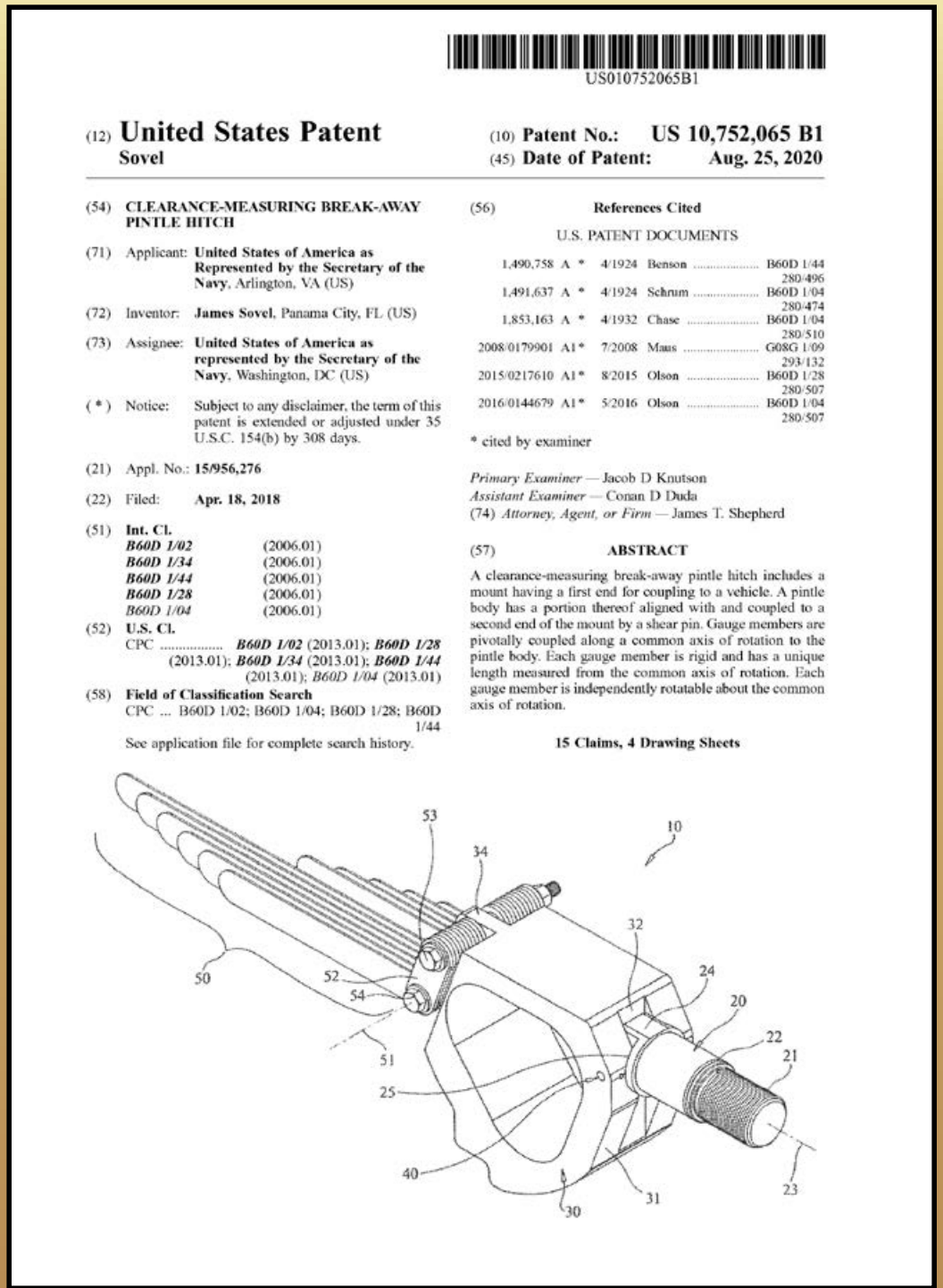
10,752,772

PATENT DATE

8/25/2020

* Indicates newly inducted into Inventor's Society

CLEARANCE-MEASURING BREAK-AWAY PINTLE HITCH



US010752065B1

(12) **United States Patent**
Sovel

(10) **Patent No.: US 10,752,065 B1**
(45) **Date of Patent: Aug. 25, 2020**

(54) **CLEARANCE-MEASURING BREAK-AWAY PINTLE HITCH**

(71) Applicant: **United States of America as Represented by the Secretary of the Navy**, Arlington, VA (US)

(72) Inventor: **James Sovel**, Panama City, FL (US)

(73) Assignee: **United States of America as represented by the Secretary of the Navy**, Washington, DC (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 308 days.

(21) Appl. No.: **15/956,276**

(22) Filed: **Apr. 18, 2018**

(51) **Int. Cl.**

B60D 1/02	(2006.01)
B60D 1/34	(2006.01)
B60D 1/44	(2006.01)
B60D 1/28	(2006.01)
B60D 1/04	(2006.01)

(52) **U.S. Cl.**
CPC ***B60D 1/02*** (2013.01); ***B60D 1/28*** (2013.01); ***B60D 1/34*** (2013.01); ***B60D 1/44*** (2013.01); *B60D 1/04* (2013.01)

(58) **Field of Classification Search**
CPC ... B60D 1/02; B60D 1/04; B60D 1/28; B60D 1/44
See application file for complete search history.

(56) **References Cited**

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2008/0179901	A1 *	7/2008	Maus	G08G 1/09 293/132
2015/0217610	A1 *	8/2015	Olson	B60D 1/28 280/507
2016/0144679	A1 *	5/2016	Olson	B60D 1/04 280/507

* cited by examiner

Primary Examiner — Jacob D Knutson
Assistant Examiner — Conan D Duda
(74) *Attorney, Agent, or Firm* — James T. Shepherd

(57) **ABSTRACT**

A clearance-measuring break-away pintle hitch includes a mount having a first end for coupling to a vehicle. A pintle body has a portion thereof aligned with and coupled to a second end of the mount by a shear pin. Gauge members are pivotally coupled along a common axis of rotation to the pintle body. Each gauge member is rigid and has a unique length measured from the common axis of rotation. Each gauge member is independently rotatable about the common axis of rotation.

15 Claims, 4 Drawing Sheets

INVENTOR

JAMES SOVEL

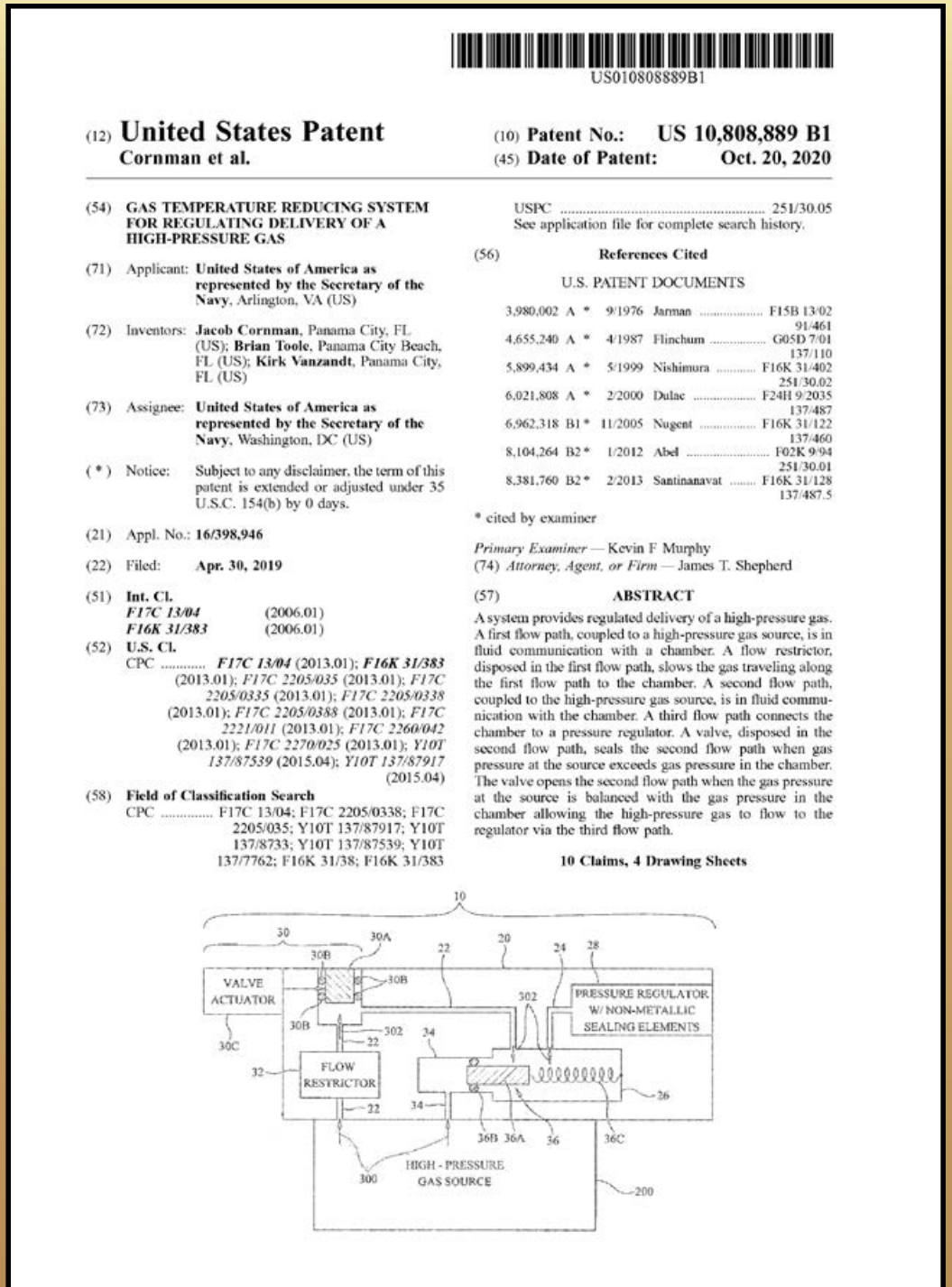
PATENT NUMBER

10,752,065

PATENT DATE

8/25/2020

GAS TEMPERATURE REDUCING SYSTEM FOR REGULATING DELIVERY OF A HIGH-PRESSURE GAS



US010808889B1

(12) **United States Patent**
Cornman et al.

(10) **Patent No.: US 10,808,889 B1**
(45) **Date of Patent: Oct. 20, 2020**

(54) **GAS TEMPERATURE REDUCING SYSTEM FOR REGULATING DELIVERY OF A HIGH-PRESSURE GAS**

(71) Applicant: **United States of America as represented by the Secretary of the Navy**, Arlington, VA (US)

(72) Inventors: **Jacob Cornman**, Panama City, FL (US); **Brian Toole**, Panama City Beach, FL (US); **Kirk Vanzandt**, Panama City, FL (US)

(73) Assignee: **United States of America as represented by the Secretary of the Navy**, Washington, DC (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **16/398,946**

(22) Filed: **Apr. 30, 2019**

(51) **Int. Cl.**
F17C 13/04 (2006.01)
F16K 31/383 (2006.01)

(52) **U.S. Cl.**
CPC ***F17C 13/04*** (2013.01); ***F16K 31/383*** (2013.01); *F17C 2205/035* (2013.01); *F17C 2205/0335* (2013.01); *F17C 2205/0338* (2013.01); *F17C 2205/0388* (2013.01); *F17C 2221/011* (2013.01); *F17C 2260/042* (2013.01); *F17C 2270/025* (2013.01); *Y10T 137/87539* (2015.04); *Y10T 137/87917* (2015.04)

(58) **Field of Classification Search**
CPC F17C 13/04; F17C 2205/0338; F17C 2205/035; Y10T 137/87917; Y10T 137/8733; Y10T 137/87539; Y10T 137/7762; F16K 31/38; F16K 31/383
USPC 251/30.05
See application file for complete search history.

(56) **References Cited**

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8,381,760	B2 *	2/2013	Santinanavat	F16K 31/128 137/487.5

* cited by examiner

Primary Examiner — Kevin F Murphy
(74) *Attorney, Agent, or Firm* — James T. Shepherd

(57) **ABSTRACT**

A system provides regulated delivery of a high-pressure gas. A first flow path, coupled to a high-pressure gas source, is in fluid communication with a chamber. A flow restrictor, disposed in the first flow path, slows the gas traveling along the first flow path to the chamber. A second flow path, coupled to the high-pressure gas source, is in fluid communication with the chamber. A third flow path connects the chamber to a pressure regulator. A valve, disposed in the second flow path, seals the second flow path when gas pressure at the source exceeds gas pressure in the chamber. The valve opens the second flow path when the gas pressure at the source is balanced with the gas pressure in the chamber allowing the high-pressure gas to flow to the regulator via the third flow path.

10 Claims, 4 Drawing Sheets

INVENTORS

JACOB CORNMAN
BRIAN TOOLE
KIRK VANZANDT

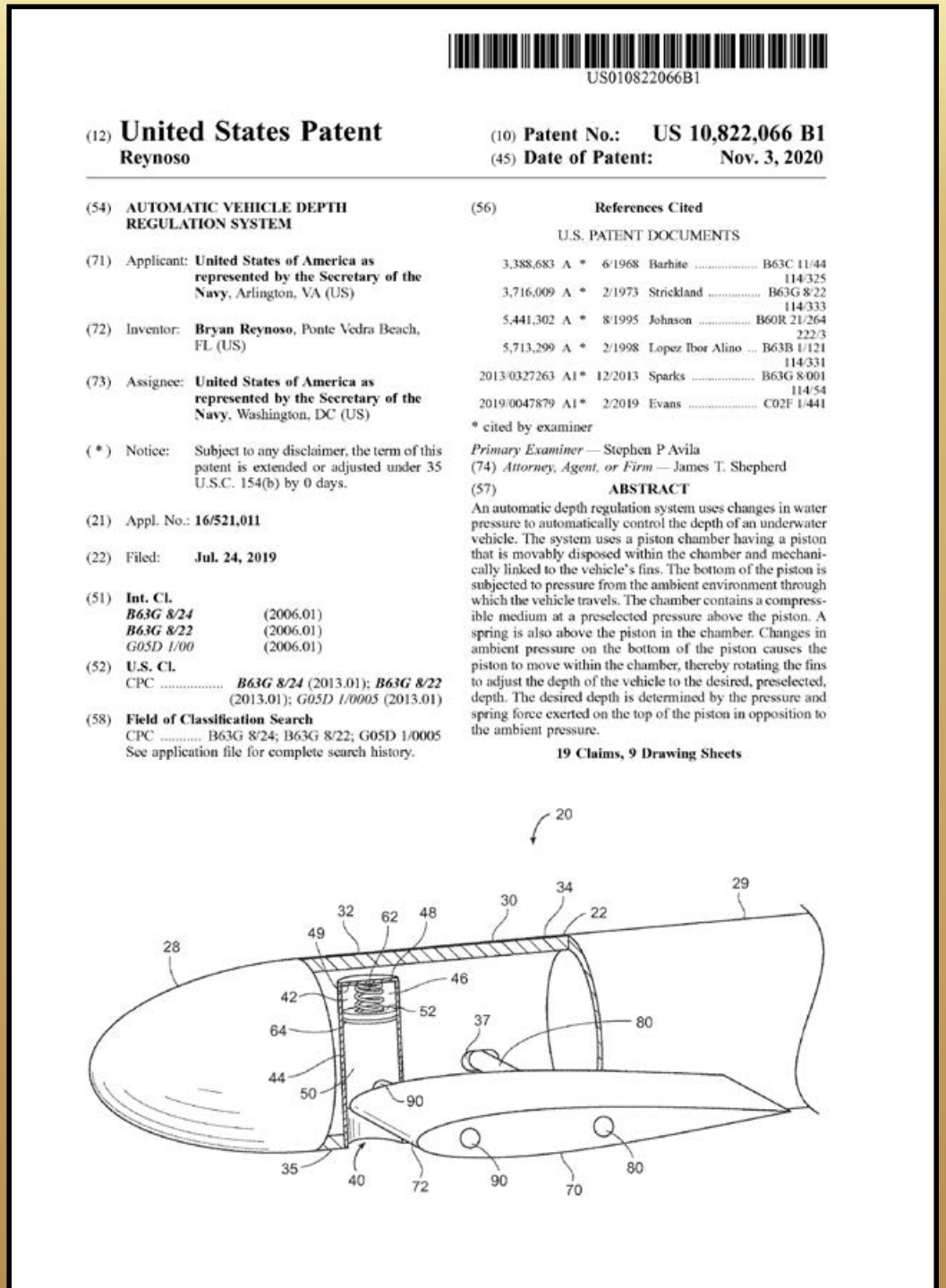
PATENT NUMBER

10,808,889

PATENT DATE

9/20/2020

AUTOMATIC VEHICLE DEPTH REGULATION SYSTEM



US010822066B1

(12) **United States Patent**
Reynoso

(10) **Patent No.: US 10,822,066 B1**
(45) **Date of Patent: Nov. 3, 2020**

(54) **AUTOMATIC VEHICLE DEPTH REGULATION SYSTEM**

(71) Applicant: **United States of America as represented by the Secretary of the Navy**, Arlington, VA (US)

(72) Inventor: **Bryan Reynoso**, Ponte Vedra Beach, FL (US)

(73) Assignee: **United States of America as represented by the Secretary of the Navy**, Washington, DC (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **16/521,011**

(22) Filed: **Jul. 24, 2019**

(51) **Int. Cl.**
B63G 8/24 (2006.01)
B63G 8/22 (2006.01)
G05D 1/00 (2006.01)

(52) **U.S. Cl.**
CPC ***B63G 8/24*** (2013.01); ***B63G 8/22*** (2013.01); *G05D 1/0005* (2013.01)

(58) **Field of Classification Search**
CPC B63G 8/24; B63G 8/22; G05D 1/0005
See application file for complete search history.

(56) **References Cited**

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2013/0327263	A1 *	12/2013	Sparks	B63G 8/001 114/54
2019/0047879	A1 *	2/2019	Evans	C02F 1/441

* cited by examiner

Primary Examiner — Stephen P Avila
(74) *Attorney, Agent, or Firm* — James T. Shepherd

(57) **ABSTRACT**

An automatic depth regulation system uses changes in water pressure to automatically control the depth of an underwater vehicle. The system uses a piston chamber having a piston that is movably disposed within the chamber and mechanically linked to the vehicle's fins. The bottom of the piston is subjected to pressure from the ambient environment through which the vehicle travels. The chamber contains a compressible medium at a preselected pressure above the piston. A spring is also above the piston in the chamber. Changes in ambient pressure on the bottom of the piston causes the piston to move within the chamber, thereby rotating the fins to adjust the depth of the vehicle to the desired, preselected, depth. The desired depth is determined by the pressure and spring force exerted on the top of the piston in opposition to the ambient pressure.

19 Claims, 9 Drawing Sheets

INVENTOR

BRYAN REYNOSO*

PATENT NUMBER

10,822,066

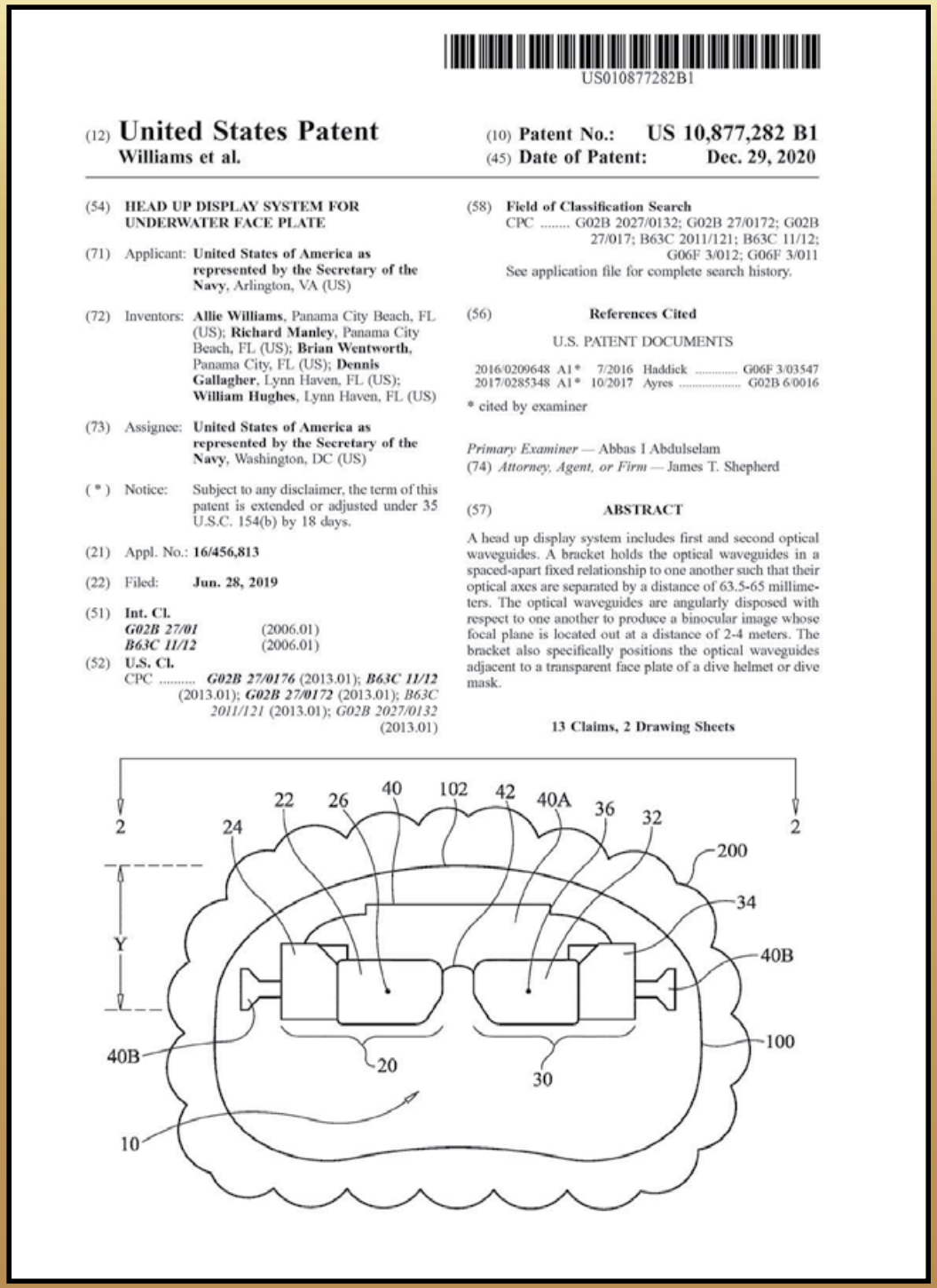
PATENT DATE

11/3/2020

* Indicates newly inducted into Inventor's Society

PATENTS

HEAD UP SYSTEM FOR UNDERWATER FACE PLATE



US010877282B1

(12) **United States Patent**
Williams et al.

(10) **Patent No.: US 10,877,282 B1**
(45) **Date of Patent: Dec. 29, 2020**

(54) **HEAD UP DISPLAY SYSTEM FOR UNDERWATER FACE PLATE**

(71) Applicant: **United States of America as represented by the Secretary of the Navy**, Arlington, VA (US)

(72) Inventors: **Allie Williams**, Panama City Beach, FL (US); **Richard Manley**, Panama City Beach, FL (US); **Brian Wentworth**, Panama City, FL (US); **Dennis Gallagher**, Lynn Haven, FL (US); **William Hughes**, Lynn Haven, FL (US)

(73) Assignee: **United States of America as represented by the Secretary of the Navy**, Washington, DC (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 18 days.

(21) Appl. No.: **16/456,813**

(22) Filed: **Jun. 28, 2019**

(51) **Int. Cl.**
G02B 27/01 (2006.01)
B63C 11/12 (2006.01)

(52) **U.S. Cl.**
CPC ***G02B 27/0176*** (2013.01); ***B63C 11/12*** (2013.01); ***G02B 27/0172*** (2013.01); *B63C 2011/121* (2013.01); *G02B 2027/0132* (2013.01)

(58) **Field of Classification Search**
CPC G02B 2027/0132; G02B 27/0172; G02B 27/017; B63C 2011/121; B63C 11/12; G06F 3/012; G06F 3/011
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

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* cited by examiner

Primary Examiner — Abbas I Abdulselam
(74) *Attorney, Agent, or Firm* — James T. Shepherd

(57) **ABSTRACT**

A head up display system includes first and second optical waveguides. A bracket holds the optical waveguides in a spaced-apart fixed relationship to one another such that their optical axes are separated by a distance of 63.5-65 millimeters. The optical waveguides are angularly disposed with respect to one another to produce a binocular image whose focal plane is located out at a distance of 2-4 meters. The bracket also specifically positions the optical waveguides adjacent to a transparent face plate of a dive helmet or dive mask.

13 Claims, 2 Drawing Sheets

INVENTORS

RICHARD MANLEY
BRIAN WENTWORTH
DENNIS GALLAGHER
WILLIAM HUGHES
ALLIE WILLIAMS*

PATENT NUMBER

10,877,282

PATENT DATE

12/29/2020

* Indicates newly inducted into Inventor's Society

Annual Awards

THE 2020 COMMANDING OFFICER AND
TECHNICAL DIRECTOR ANNUAL AWARDS

Categories

COLLABORATION EXCELLENCE

DR. DAVID P. SKINNER AWARD FOR
OUTSTANDING SCIENTIFIC AND ENGINEERING ACHIEVEMENT

EXCEPTIONAL TECHNICAL SUPPORT

EXEMPLARY LEADERSHIP

NEW PROFESSIONAL EXCEPTIONAL ACHIEVEMENT

OUTSTANDING FLEET SUPPORT

OUTSTANDING INNOVATION

OUTSTANDING ORGANIZATIONAL SUPPORT

OUTSTANDING PROGRAM SUCCESS

OUTSTANDING TEAM ACHIEVEMENT

TECHNICAL EXCELLENCE

HALL OF FAME

COLLABORATION EXCELLENCE AWARD

Dr. Cameron Matthews

For exemplary efforts in creating new relationships and fostering existing partnerships with over nine organizations, including other Warfare Centers, while overseeing more than 20 individuals across three different departments and many career paths. Dr. Matthews developed and fielded a number of sensing solutions and low-cost Unmanned Underwater Vehicle (UUV) designs for a wide range of partners conducting littoral Counter-UUV (CUUV) testing and data collection events. He was awarded more than $1M in coveted Defense Advanced Research Projects Agency funding for the Persistent Aquatic Living Sensors project. Dr. Matthews also lead the Rapid Prototyping and Experimentation project which is a multiple Warfare Center effort.

Dr. Matthews represents Naval Surface Warfare Center Panama City Division for the Executive Director's Cup, a cross-Warfare Center competition collaboration with NSWC Crane. Along with his collaboration, leadership, and organizational efforts, Dr. Matthews is regularly called upon to brief end-users and program officers. He is also the lead for the CUUV Community of Interest, a group of more than 200 Department of Defense stakeholders. Dr. Matthews led the way for leveraging external resources and making every dollar count. For Dr. Matthews' tireless contributions to advance United States Naval capabilities through leadership and collaboration, he is recognized as the 2020 Collaboration Excellence Award recipient.

AWARD NOMINEES

- Tyler Moak
- Phillip "Gabe" Allen
- Quickstrike Extended Range Team

DR. DAVID P. SKINNER OUTSTANDING SCIENTIFIC AND ENGINEERING AWARD

Dr. Robert Cole

For exceptional engineering contributions towards characterizing and charting the path to overcoming the Landing Craft Air Cushion (LCAC) 100's number one technical issue faced. Dr. Cole is recognized as the expert in Air Cushion Vehicle (ACV) propulsion, lift fan, bow thruster, and machinery systems. His developed action plan to gather and analyze propeller performance data, ensuring critical information was captured and analyzed, directly led to identifying valuable short-term solutions. Dr. Cole is being recognized for the exceptional engineering performed to help address the propeller performance problems. These solutions significantly saved the program life on cost, and provided more time, while long-term solutions were researched. For Dr. Cole's contributions towards solving the LCAC 100's number one technical issue, he is recognized as the 2020 Dr. David P. Skinner Outstanding Scientific and Engineering Award recipient.

AWARD NOMINEE Dr. Isaac Sledge

EXCEPTIONAL TECHNICAL SUPPORT

Jessica Haig

For providing invaluable technical support across multiple disciplines, including Test and Evaluation (T&E), Test Directing, Oceanography, and Science and Technology - often supporting more than one of these disciplines simultaneously during the same event. Jessica has an inspiring work ethic and unparalleled contributions in her many roles in the Navy Test and Evaluation community. Jessica successfully collected more than 72 data casts of invaluable environmental data for system performance evaluation while living at-sea and working irregular hours in high sea states. She provided technical support above and beyond her tasked responsibilities. During the COVID-19 outbreak, Jessica provided critical contributions despite the challenges faced to ensure the baseline schedule would continue as planned. Jessica also distinguished herself as a young professional ambassador for T&E as she has taken on the role of mentoring new hires. Jessica has impacted multiple entities internally and externally through her exceptional technical expertise and her inspiring attitude and for this she is being recognized as the 2020 Exceptional Technical Support Award recipient.

AWARD NOMINEES

- Bill Vandiver
- Seal Delivery Vehicle (SDV) Dive Support Team
- Rebecca McConnell
- Courtney “Amanda” Brown

EXEMPLARY LEADERSHIP AWARD

Rachael Robinson

For inspiring success in others and effectively leading many individuals and programs. Through her leadership, Rachael has established an extremely high level of customer satisfaction that ensures open communications, team working on problem resolution, and collaboration on future work efforts. She has established a trust-based communication flow with the sponsors on work accomplishments, issues and risks, funding status, project personnel resource status, and contracted work efforts. As the program manager for PMS 420 and 501, she provides a huge personal commitment of time and energy. Rachael's work ethic is infectious and she is the embodiment of a "leader by example." For Rachael's character, courage and vision to not only succeed personally, but to inspire success in her teams and individual team members, she is recognized as the 2020 Exemplary Leadership Award recipient.

AWARD NOMINEES

- Michael Conn
- Kimberly Lawler
- Brian Mathewson
- Jena Rhea

NEW PROFESSIONAL EXCEPTIONAL ACHIEVEMENT AWARD

Emily Keihn

For her impressive accomplishments in over two years at Naval Surface Warfare Center Panama City Division (NSWC PCD). Emily stands out for the significant technical contributions she has made in a short time on several big programs at NSWC PCD. She has come up with viable new design concepts, lead system development, and worked directly with sponsors and stakeholders to help inform their decision-making. Emily is also exceptional for her understanding of the value of sharing knowledge. She does not wait until she is a senior employee to share her knowledge, she has regularly participated in the Science, Technology, Engineering, and Math (STEM) outreach with the local school district. Emily is one of the first employees to complete the New Professional Program and is a shining example of how the program can benefit the organization and individual. For her outstanding contributions since being hired, Emily is the 2020 New Professional Exceptional Achievement Award recipient.

AWARD NOMINEES

- Hayden DeForge
- E Dept. Director's Cup Team
- Natasha Gabreleski
- Michael Kleinbauer
- Roberto Santana Centeno

OUTSTANDING FLEET SUPPORT

Deployable Joint Command and Control (DJC2) Virtual Secure Enclave (VSE) In-Service Engineering Service (ISEA) Team

THE TEAM

- Kevin Wooten
- Zachary Hartley
- Michael Barrenechea
- Wendy Najacque
- John (Trey) Christmas III
- James (Jim) Nelson
- Manuel (Manny) Rodriguez

For their exceptional performance in installation events, rolling out the new version of the Virtual Secure Enclave (VSE) baseline, and supporting the Navy in determining how to use VSE in the future to protect our tactical networks from enemy intrusion. The Deployable Joint Command and Control (DJC2) VSE In-Service Engineering Agent (ISEA) team's success has garnered significant accolades from the fleet, including Senior Executive Service level leaders. The team's success is evident by the accolades and even more by the fact U.S. TENTH Fleet (C10F) is considering establishing VSE as the Navy's primary tactical operations network. For the exceptional support the team provides to the fleet, benefits to the warfighter, and the impact it has made, the DJC2 VSE ISEA Team is recognized as the 2020 Outstanding Fleet Support Award recipient.

AWARD NOMINEES

- AN/AQS-24 Project Team
- Joint Expeditionary Command and Control (JEXC2) In-Service Engineering Agent (ISEA) Team
- MK18 Team
- Mine Warfare Readiness and Effectiveness Measuring (MIREM) Team
- Mission Package Computing Environment (MPCE) In-Service Engineering Agent (ISEA) Team

OUTSTANDING INNOVATION AWARD

EX 28 Team

THE TEAM

- Brian Toole
- Kirk Vanzandt
- Jacob Cornman
- Dylan Gouletas
- Anthony Bleichner
- Jonas Hudson
- Al Porteus
- Frank Crane

For using technical talent and skill, innovative problem solving, unwavering dedication, incredible teamwork, and sheer determination to successfully deliver the required five production units to Navy Experimental Diving Unit and achieving the seemingly impossible deadline. The EX 28 team developed two additional capabilities during the certification process, providing more capability than originally envisioned. The EX 28 team developed the Emergency Life Support Vertical Insertion System in less than four months, enabling successful completion of the at-sea demonstration dives. The Controlled Oxygen Breathing Apparatus was also developed as an emergency backup breaking system in hyperbaric spaces and greatly reduce the required stored gas volumes. For providing a critically needed capability to the warfighter, being an inspiring example of exactly how capable dedicated teams with a common purpose can be, and how creativity and innovation can help make the seemingly impossible doable, the EX 28 team is recognized as the 2020 Outstanding Innovation Award recipient.

Not pictured: Brian Toole, Kirk Vanzandt

AWARD NOMINEES

- Clandestine Delivered Mine Project Team (CDM) Team
- Electronic Ventilation Assist (EVA) Team
- Alex Dence

OUTSTANDING ORGANIZATIONAL SUPPORT AWARD

Komal Patel

For her tedious work, dedication to the command and Warfare Centers, and expertise. Komal's contributions and achievements were not only vital to the Comptroller Department, but also Naval Surface Warfare Center Panama City Division and the Warfare Center community. Despite restrictions encountered due to COVID-19, Komal still trained two new accountants that enabled them to quickly take on the workload, as well as two successful virtual training events. Due to Komal's tedious work of compiling backup documentation and manually transferring documentation in two days, she saved the command $118k. Komal was asked by Warfare Center Headquarters to represent the Warfare Center community in a virtual walkthrough of the financial statement compilation and reconciliation process to auditors who were impressed with Komal's expertise and knowledge. For going above and beyond her job responsibilities and paving a way despite current conditions to ensure success and growth for the Command, Komal is recognized as the 2020 Outstanding Organizational Support Award recipient.

AWARD NOMINEES

- Katherine Mapp
- Lisa Arrieta
- Haley Walker
- Emily Little
- Angela Taylor
- Nicole Newsome
- Vinh Tran

OUTSTANDING ORGANIZATIONAL SUPPORT AWARD

Leslie O'Brien

For her noteworthy accomplishments and contributions to the overall Naval Sea Systems Command (NAVSEA) mission resulting in positive outcomes for Naval Surface Warfare Center Panama City Division's (NSWC PCD) technical capabilities. Leslie is significant to the future of procurement at NSWC PCD. She has achieved establishing acquisition goals in a timely and affordable, cost-effective manner, saving the government approximately $1.48 million in fiscal year 2020 negotiations. Leslie's efforts embody NAVSEA's mission and her dedication to ensure every procurement is awarded ahead of schedule was noticed by NSWC PCD's largest customer, PMS 495. Leslie also mentors entry-level contract specialists and seasoned senior contract specialists as she is known as one who brings willingness to tutor others with her wealth of contracting knowledge. For her significant role in implementing NAVSEA00's Strategic Plan, NSWC PCD TD's Strategic Plan, and NSWC PCD Contract office initiatives to streamline contracting, Leslie is recognized as the 2020 Outstanding Organizational Support Award recipient.

AWARD NOMINEES

- Katherine Mapp
- Lisa Arrieta
- Haley Walker
- Emily Little
- Angela Taylor
- Nicole Newsome
- Vinh Tran

OUTSTANDING ORGANIZATIONAL SUPPORT AWARD

David Neet

For his creativity to enhance the experience and innovation to address challenges resulting in an onboarding program that is the best this command has hosted in many years. David unfailingly hosts all of the command's new hires who bring a wide variety of professional experiences and career levels, conducting over 200 mandatory training lessons throughout 25 onboarding classes. While facing the COVID-19 pandemic, David quickly modified the design of onboarding to a virtual format in under 18 hours. He regularly modifies the program after receiving feedback to continually improve the program, resulting in an average rating of 4.75 out of 5 on satisfaction and effectiveness for the year. For his outstanding contributions to the command, innovativeness to provide quality onboarding virtually, and ability to quickly modify and improve the program, David is recognized as the 2020 Outstanding Organizational Support Award recipient.

AWARD NOMINEES

- Katherine Mapp
- Lisa Arrieta
- Haley Walker
- Emily Little
- Angela Taylor
- Nicole Newsome
- Vinh Tran

OUTSTANDING PROGRAM SUCCESS AWARD

Clandestine Delivered Mine (CDM)

THE TEAM

- Marty Richardson
- Stephen Hoyer
- Tony Simpson
- John Sojdehei
- Steve Akin
- Matt Warrell
- Jim Keith
- Donnie Kiper
- Austin Schwarz
- Matt Naughton
- Jordan Bolduc
- Phillip Cederstrom
- Steve Crowley
- Raymond Myers

For designing, building, and demonstrating the U.S. Navy's first ever Remote Control (RECO) of a Maritime Minefield. The Clandestine Delivered Mine (CDM) Project Team developed a RECO capable mine and designed the mine behaviors and control schema that will allow RECO to be a useful tool for today's Naval Fleet. The CDM Team accomplished this while reducing the burden of verification and validation testing by months if not years and from a 14-foot Submarine Launch Mobile Mine into a compact 56-inch package. The size and weight reduction enables Unmanned Undersea Vehicle delivery of multiple weapons. For their success in designing, building and demonstrating the first ever Maritime Minefield RECO, the CDM Team is recognized as the 2020 Outstanding Program Success Award recipient.

Not pictured: Steve Akin

AWARD NOMINEES

- Barracuda Team
- Kristen Campbell
- Pamela Fuhrman
- Dr. Jeremy Hatcher
- Stephen Howell
- Brian Toole
- Robert Woodall

OUTSTANDING TEAM ACHIEVEMENT AWARD

Positive End Expiratory Pressure (PEEP) Regulated Emergency Ventilator (PRE-Vent)

THE TEAM

- Dr. Andrew Schicho
- Dr. Greg Murphy
- Dr. Christopher Musto
- Jason Scott
- Michael Kirke
- Gavin Taylor
- Dustin Bride
- Jesse Waymire
- Holly Gardner
- Bill Ramey
- Greg Holbrook

For the exceptional program accomplishments of this project team, and the extraordinary partnership and perseverance of every member. The Positive End Expiratory Pressure (PEEP) Regulated Emergency Ventilator (PRE-Vent) is a low-cost ventilator for COVID-19 victims that can be assembled from parts found at a hardware store using a set of simple instructions and was developed in just under two months. It took extraordinary dedication and personal sacrifice from each team member to close the gap in the availability and production of ventilators. The United States Special Operations Command Vulcan platform launched the "Hack-a-Vent Challenge" resulting in 172 responses across academia, industry, and government. Only five prototypes were recommended, PRE-Vent being one and the only from a government team. A mass production of PRE-Vent has been prepared and will be used effectively and immediately by physicians. For the significant achievement contributing to the success of Naval Surface Warfare Center Panama City Division and an increased chance of survival for those impacted by COVID-19 by creating the highest quality product at the lowest cost, the PRE-Vent Team is recognized as the 2020 Outstanding Team Achievement Award recipient.

Not pictured: Greg Holbrook

AWARD NOMINEES

- Coastal Battlefield Reconnaissance and Analysis System (COBRA) Procurement Team
- Dormant Accounts Receivable Quarterly Comptroller Team (DARQ) Comptroller Team
- EX 28 Team
- MK18 Scuttle Implementation Team
- Mine Countermeasures Mission Package Tactic and Analysis Team
- Mine Countermeasures Unmanned Surface Vessel Team
- Quickstrike Extended Range Team
- Quickstrike Mod 3 Project
- Precise Integrated Navigation System In-Service Engineering Agent (PINS) ISEA Team Unmanned Multi-Rotor Ariel Relay Team
- Workforce Development Team

OUTSTANDING TEAM ACHIEVEMENT AWARD

Mine Countermeasures Mission Package Test and Evaluation Team

THE TEAM

- Amanda Elkins
- Le'Derick Smedley
- Jason Newton
- Bruce Potemken
- Jonathan Shiver
- Dr. Erin Cotton
- Shin Miin A Tzuoo
- Nate Waldstein
- Logan McCall
- Gabriel Perez-Figuerola
- Jeffrey Blankenship
- Russ Wilson
- Mike Sullivan
- Robert Gilardi
- Nicole Pagan-Montanez
- Douglas Guardino
- Steen Jensen
- Thuy Tran

For their exemplary cooperative efforts and outstanding collaboration supporting numerous Mine Countermeasures (MCM) Mission Package (MP) Test and Evaluation (T&E) events on the Littoral Combat Ship and on Vessels of Opportunity. The T&E team provided critical personnel and subject matter experts for the many testing events in Fiscal Year 2020. The team provides the backbone for all significant test events leading up to Initial Operation (IO) T&E. The team actively demonstrates facets of each Naval Surface Warfare Center Panama City Division Strategic Objectives. For their achievement in collaborating, leading, and supporting successful IOT&E as a team, the MCM MP T&E Team is recognized as the 2020 Outstanding Team Achievement Award recipient.

Not pictured: Amanda Elkins, Jonathan Shiver, Shin Miin A Tzuoo, Jeffrey Blankenship, Douglas Cuardino

AWARD NOMINEES

- Coastal Battlefield Reconnaissance and Analysis System (COBRA) Procurement Team
- Dormant Accounts Receivable Quarterly Comptroller Team (DARQ) Comptroller Team
- EX 28 Team
- Mine Countermeasures Mission Package Tactic and Analysis Team
- Mine Countermeasures Unmanned Surface Vessel
- MK18 Scuttle Implementation Team
- Unmanned Multi-Rotor Ariel Relay Team
- Precise Integrated Navigation System In-Service Engineering Agent (PINS) ISEA Team
- Quickstrike Extended Range Team
- Quickstrike Mod 3 Project
- Workforce Development Team

TECHNICAL EXCELLENCE AWARD

Leonard Maxwell

For his outstanding body of technical work on Air Cushion Vehicle (ACV) Systems, including both the Landing Craft, Air Cushion (LCAC) program and Ship-to-Shore Connect program/LCAC 100 Class and his active role in mentoring new engineers. The Navy, Naval Surface Warfare Center Panama City Division, and its ACV programs benefit greatly from the senior technical positions Leonard holds, and the guidance and hands-on expertise he provides. The warfighter benefits from the technical work Leonard does in helping advance warfighter capabilities, and in finding new ways to provide relevant fleet support products that enable them to train more effectively and use their capabilities well. Leonard is also committed to making an impact on the future of engineering development and the careers of new engineers, sacrificing time and energy to actively mentor new talent. For all of his contributions, Leonard is recognized as the 2020 Technical Excellence Award recipient.

AWARD NOMINEES

- Amanda Bobe
- Kate Brackett
- Jennifer Conner
- William Pinkerton
- Christopher Voorheis
- Nicole Waters

Hall of Fame

PRESENTED TO

STEPHEN HUDSON

For his long and distinguished career in support of developing data collection for the intelligence community. Stephen transformed a niche group into a significant organization with numerous projects delivering vital strategic intelligence in support of our country's security. He is considered a subject matter expert in the field of data collection by a number of intelligence organizations and his opinions were routinely sought and highly valued. After retirement, Stephen was acquired for two different terms as a retired annuitant. The group Stephen managed provided a large amount of funding and the organization was a part of every department. Stephen's greatest effect was in the area of professional development and mentoring. He single handedly built the next generation of leaders within the Naval Surface Warfare Center Panama City Division intelligence collection community. For the long-term effects of being an innovative engineer, extraordinary manager, unparalleled leader, and gifted mentor, Stephen is the 2020 Hall of Fame Award recipient.

AWARD NOMINEE
Robert B. Cole

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