

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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PARROT S.A., PARROT DRONES, S.A.S. and PARROT INC.,  
Petitioners,

v.

QFO LABS, INC.,  
Patent Owner.

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Case IPR2016-01550  
Patent 7,931,239 B2

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Before MEREDITH C. PETRAVICK, HYUN J. JUNG, and  
SCOTT C. MOORE, *Administrative Patent Judges*.

JUNG, *Administrative Patent Judge*.

FINAL WRITTEN DECISION  
*35 U.S.C. § 318(a) and 37 C.F.R. § 42.73*

## I. INTRODUCTION

Parrot S.A., Parrot Drones S.A.S., and Parrot Inc. (“Petitioners”) filed a Petition (Paper 2, “Pet.”), requesting institution of an *inter partes* review of claims 1–10 of U.S. Patent No. 7,931,239 B2 (Ex. 1001, “the ’239 patent”). QFO Labs, Inc. (“Patent Owner”) filed a Preliminary Response (Paper 10). Upon considering the Petition and the Preliminary Response, we instituted *inter partes* review of claim 10 of the ’239 patent. Paper 18 (“Dec. on Inst.”).

After institution, Patent Owner filed a Response (Paper 32, “PO Resp.”) and a Contingent Motion to Amend (Paper 31, “Mot.”). Petitioners filed a Reply (Paper 41, “Pet. Reply”) and an Opposition to Patent Owner’s Contingent Motion to Amend (Paper 42), to which Patent Owner filed a Reply to Petitioner Opposition to Contingent Motion to Amend (Paper 43). Because of the then-recently issued *en banc* decision in *Aqua Products, Inc. v. Matal*, 872 F.3d 1290 (Fed. Cir. 2017) (“*Aqua Products*”), the parties requested, and we authorized, additional briefing regarding Patent Owner’s Contingent Motion to Amend. Paper 47. Petitioners thereafter filed a Brief in Opposition to Patent Owner’s Contingent Motion to Amend (Paper 51), and Patent Owner filed a Reply to Petitioner Opposition to Contingent Motion to Amend (Paper 52), to which Petitioners filed a Sur-Reply Brief in Opposition to Patent Owner’s Contingent Motion to Amend (Paper 56).

Petitioners proffered a Declaration of Prof. Girish Chowdhary, Ph.D. in Support of Petition (Ex. 1003, “First Chowdhary Declaration” or “1st Chowdhary Decl.”), a Declaration of Prof. Girish Chowdhary, Ph.D. in Support of Petitioners’ Opposition to Patent Owner’s Contingent Motion to Amend and Its Reply to Patent Owner’s Response (Ex. 1030, “Second

Chowdhary Declaration”), and a Declaration of Prof. Girish Chowdhary, Ph.D. in Support of Petitioners’ Brief in Opposition to Patent Owner’s Contingent Motion to Amend (Ex. 1037, “Third Chowdhary Declaration” or “3d Chowdhary Decl.”). Patent Owner proffered a Declaration of John P. Condon (Ex. 2005, “1st Condon Decl.”) with its Preliminary Response and a Second Declaration of John P. Condon (Ex. 2013, “Second Condon Declaration” or “2d Condon Decl.”) with its Response. A deposition transcript for Mr. Condon (Ex. 1035) was filed, but no deposition transcript was filed for Prof. Chowdhary.

A joint oral hearing in this proceeding and Case IPR2016-01559 was held on November 15, 2017; a transcript of the hearing is included in the record (Paper 59, “Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons that follow, we determine that Petitioners have shown by a preponderance of the evidence that claim 10 of the ’239 patent is unpatentable. Also based on the entirety of the record, we *deny* Patent Owner’s Contingent Motion to Amend.

*A. Ground of Unpatentability at Issue*

We instituted *inter partes* review on the ground that, under 35 U.S.C. § 103, claim 10 is unpatentable over Louvel<sup>1</sup>, Thomas<sup>2</sup>, and Jimenez<sup>3</sup>. Dec. on Inst. 27, 36.

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<sup>1</sup> US 2002/0104921 A1, published Aug. 8, 2002 (Ex. 1004).

<sup>2</sup> US 5,128,671, issued July 7, 1992 (Ex. 1006).

<sup>3</sup> US 2002/0106966 A1, published Aug. 8, 2002 (Ex. 1007).

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*B. Related Proceedings*

Patent Owner indicates that the '239 patent, U.S. Patent No. 9,073,532 B2 (“the '532 patent”) (Ex. 2002), and U.S. Patent No. 9,645,580 B2 (“the '580 patent”) (Ex. 2012) are involved in case 1:16-cv-00682-GM in the U.S. District Court for the District of Delaware. Paper 8, 1–2; Paper 19, 3; PO Resp. 10; Paper 48, 3; Paper 57, 3; *see also* Pet. 75 (indicating intent to file an action in the District of Delaware). The parties indicate that the '532 patent issued from a continuation application of the '239 patent, and the '580 patent issued from a continuation application of the '532 patent. Pet. 75; Paper 8, 1–2; Paper 19, 1–2; Mot. 6; PO Resp. 8; Paper 48, 2; Mot. 5–6; Paper 57, 2.

Patent Owner also indicates that the '239 patent, the '532 patent, and the '580 patent were asserted against Petitioners in case 0:16-cv-03443-JRT-HB (D. Minn.) and in *QFO Labs, Inc. v. Brookstone Stores, Inc.*, case 0:17-cv-01100-JNE-SR (D. Minn.), both of which were dismissed. Paper 19, 3–4; PO Resp. 10; Paper 48, 4; Paper 57, 4; Ex. 1027. Patent Owner further indicates that the '239, '532, and '580 patents have been asserted in *QFO Labs, Inc. v. Amazon.com, Inc.*, case 0:17-cv-05014-DWF-HB (D. Minn.); *QFO Labs, Inc. v. Best Buy Co., Inc.*, case 0:17-cv-5011-JNE-TNL (D. Minn.); and *QFO Labs, Inc. v. Target Corp.*, case 0:17-cv-05012-JRT-DTS (D. Minn.). Paper 57, 5.

The '239 patent is also the subject of Case IPR2017-01089; the '532 patent is the subject of Cases IPR2016-01559 and IPR2017-01090; and the '580 patent is the subject of Case IPR2017-01400. Paper 8, 1–2; Paper 19, 1–2; PO Resp. 10; Paper 48, 2; Paper 57, 2; Ex. 1026; Ex. 2014. We denied institution in IPR2017-01089, IPR2017-01090, and IPR2017-01400.

*C. The '239 Patent (Ex. 1001)*

The '239 patent relates to a “homeostatic flying hovercraft and to a radio controlled flying saucer toy employing the [principles] of a homeostatic flying hovercraft.” Ex. 1001, 1:19–21. Figure 21 of the '239 patent is reproduced below:

**Fig. 21**

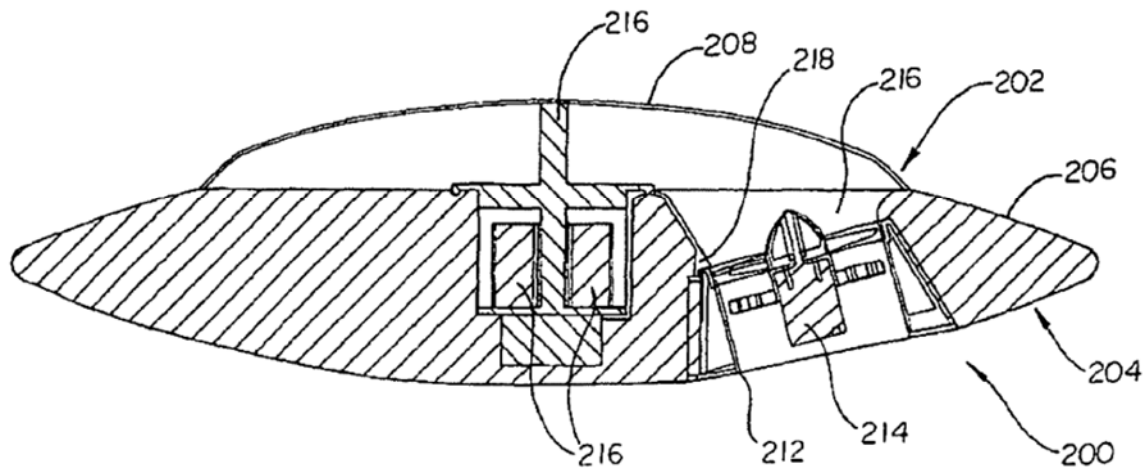


Figure 21 illustrates a “side cutaway view” of a “preferred embodiment of a homeostatic flying hovercraft.” *Id.* at 8:44–46, 8:54–55, 9:14–16. Homeostatic flying craft 200 has upper surface 202, bottom surface 204, four duct openings 212 on bottom surface 204, and battery-powered ducted fan 214 mounted inboard from each duct opening 212. *Id.* at 9:14–29. Each fan 214 is powered from an internal pair of batteries 216. *Id.* at 9:41–42; *see also id.* at 12:27–13:8, 13:34–60 (describing embodiment of Figs. 1–3).

Homeostatic control system 300 is “operably connected to thrusters . . . in order to maintain a desired orientation” and includes “XYZ sensor arrangement 302 and associated control circuitry 304 that dynamically determines an inertial gravitational reference.” *Id.* at 10:64–11:5; *see also*

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