

**REDACTED VERSION**

**UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF PENNSYLVANIA**

DRONE TECHNOLOGIES, INC.,

Plaintiff,

v.

PARROT S.A., PARROT, INC.,

Defendants.

C.A. No. 2:14-cv-00111

Judge Arthur J. Schwab

**EXPERT REPORT OF  
NED S. BARNES, CPA**

February 13, 2015



1800 M Street, NW  
Washington, DC 20036

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**TABLE OF CONTENTS**

I.	QUALIFICATIONS AND ASSIGNMENT	3
II.	SUMMARY OF CONCLUSIONS	5
III.	DRONE TECHNOLOGIES	6
IV.	PARROT AND THE INFRINGING PRODUCTS	8
	A. The Infringing Products	9
	B. Popularity, Commercial Success and Profitability	11
	C. Importance of Infringing Functionalities	13
	D. Efforts to Remove the Infringing Functionalities	15
	E. Analysis of AR.Drone Sales	18
	F. Price Comparison Analysis	21
V.	REASONABLE ROYALTY ANALYSIS	23
VI.	DAMAGES CONCLUSION	43

**REDACTED VERSION**

**I. QUALIFICATIONS AND ASSIGNMENT**

1. I am a Managing Director in the Washington, D.C. office of the Berkeley Research Group (“BRG”), a financial and economic consulting firm. I am a Certified Public Accountant and a Certified Fraud Examiner. I specialize in financial forensic investigations and the analysis of complex damages in the context of litigation, arbitration, and other commercial dispute settings. I have experience analyzing issues related to the calculation of possible economic damages in various commercial disputes, including those related to intellectual property such as alleged patent infringement. I have authored expert reports and provided expert testimony on economic damages related to various types of intellectual property disputes, including those related to alleged patent infringement.<sup>1</sup> I have also been qualified as an expert on the calculation of possible economic damages concerning intellectual property disputes in Federal District Courts and in arbitration proceedings. I have also been retained to consult with clients and counsel on issues related to the valuation of patents and other intellectual property in the context of actual or proposed licensing activities. BRG bills for my work on this matter at a rate of \$495 per hour.<sup>2</sup>

2. I was retained by counsel for Drone Technologies Inc. (“Drone Technologies”) to consider issues related to economic damages resulting from the alleged infringement of United States Patent Numbers 7,584,071 (“the 071 Patent”) and 8,106,748 (“the 748 Patent”) by Parrot S.A and Parrot, Inc. (collectively, “Parrot”). Collectively, the 071 Patent and the 748 Patent are referred to herein as the “Drone Patents.” Pursuant to a November 3, 2014 Memorandum Opinion, the Court “enter[ed] default judgment against [Parrot] on liability as to infringement of

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<sup>1</sup> See **Exhibit 1** to this report for my curriculum vitae, which includes a list of matters on which I have provided trial and/or deposition testimony during the last four years.

<sup>2</sup> BRG’s compensation is not contingent upon the outcome of this matter.

**REDACTED VERSION**

the [Drone Patents].”<sup>3</sup> I understand in this respect that products manufactured and/or marketed by Parrot as “AR.Drone,”<sup>4</sup> “MiniDrone,”<sup>5</sup> and “Bebop Drone” have been determined to infringe the Drone Patents.<sup>6</sup> I was asked to estimate the amount of economic damages suffered by Drone Technologies as a result of Parrot’s alleged infringement of the Drone Patents. Specifically, I was asked determine the royalty payments that would be reasonable and appropriate for Parrot’s alleged infringement of the Drone Patents. In consideration of these issues, I analyzed information relevant to estimating the incremental value of the infringing functionalities, as it relates to the Infringing Products. As part of my analysis, I considered issues relevant to determining the likely outcome of a hypothetical negotiation between Drone Technologies and Parrot for a license to the Drone Patents occurring around the time when the alleged infringement began.<sup>7</sup> As discussed herein, I have assumed, consistent with available information, that the alleged infringement began on January 31, 2012, the issue date of the 748 Patent.<sup>8</sup> In connection with my work in this matter, I relied on my educational background and professional training and experience. I reviewed pleadings and other case filings, documents produced by the parties, and certain information obtained from public sources.<sup>9</sup>

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<sup>3</sup> Memorandum Opinion Re: Plaintiff’s Motion For Order To Show Cause Why Defendants Should Not Be Held In Contempt; Document Number 78; November 3, 2014. (“11/3/14 Memorandum Opinion”).

<sup>4</sup> Includes AR.Drone and AR.Drone 2.0 products.

<sup>5</sup> Includes “Jumping Sumo” and “Rolling Spider” drone products.

<sup>6</sup> See, Complaint For Patent Infringement. (“Complaint”) and Order of Court Granting Plaintiff’s Motion to Compel Damages Discovery, 12/16/2014 (“12/16/14 Order”). See also, 11/3/14 Memorandum Opinion. The AR.Drone, AR.Drone 2.0, MiniDrone, and Bebop Drone products are collectively referred to herein as the “Infringing Products.”

<sup>7</sup> *Georgia-Pacific v. United States Plywood Corp.*, 318 F. Supp. 1116, (S.D.N.Y. 1970) modified 446 F.2d 295 (2d Cir. 1971), cert. denied 404 U.S. 870 (1971) (“Georgia-Pacific” herein). References to legal cases here and elsewhere in this report are not intended to convey any legal opinions or interpretations.

<sup>8</sup> I understand that the 748 Patent is directed at the “accelerometer mode” functionality that has been present in all AR.Drone products since they were introduced in 2010. As noted herein, the 071 Patent issued in September 2009. However, the 071 Patent, I understand, covers the infringing “absolute control” functionality that was introduced in March 2012.

<sup>9</sup> **Exhibit 2** to this report includes a list of materials and information that I have considered in connection with my work in this matter.

**REDACTED VERSION****II. SUMMARY OF CONCLUSIONS**

3. In my opinion, a conservative estimate of the reasonable royalty rates for Parrot's infringement of the Drone Patents would be approximately \$16 per unit for AR.Drone and Bebop Drone products, and approximately \$6 per unit for MiniDrone products. It is my opinion that these royalty rates reflect reasonable estimates as to the incremental economic contribution of a license to the Drone Patents as it would relate to the Infringing Products sold by Parrot, and are conservative. This conclusion, in my opinion, is also consistent with a consideration of the relevant Georgia-Pacific factors, in combination with available facts and information. Applying these per-unit royalty rates to the number of unit sales of Infringing Products to date – including estimated sales through June 2015, results in total royalties of approximately [REDACTED]. It is my opinion that the aforementioned per-unit royalty rates represent amounts that Parrot would be willing to pay as a royalty while still earning a reasonable profit, consistent with the framework set forth in Georgia-Pacific.

4. The above per unit royalty rates would also apply to sales of Infringing Products by Parrot subsequent to June 2015, through the expiration of the Drone Patents. I have also considered the amount of a lump sum payment that would be appropriate for a fully paid-up license to use the Drone Patents in the future. In my opinion, a reasonable lump sum payment for unlimited use of the Drone Patents after July 2015 would be approximately \$17.3 million.<sup>10</sup> This estimated lump sum payment is based on my consideration of Parrot's historical and projected unit sales data, in combination with available information concerning the estimated life-cycle of the relevant Infringing Products.

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<sup>10</sup> Total reasonable royalties as of June 30, 2015, including this lump sum payment for projected future use, are approximately [REDACTED] million. As discussed herein, however, these total royalties as of June 30, 2015 does not take into account new products that may be introduced in the future by Parrot that utilize the infringing functionalities.

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