

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

LUMINTEC, LLC.

Plaintiff,

v.

MOTOROLA MOBILITY, LLC,

Defendant.

CIVIL ACTION NO. 6:21-cv-402-ADA

JURY TRIAL DEMANDED

**FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT**

Under Fed. R. Civ. P. 15(a)(1)(B), Plaintiff, Lumintec, LLC. (“Lumintec”), for its First Amended Complaint against Motorola Mobility LLC (“Motorola”) alleges, based on its own knowledge as to itself and its own actions, and based on information and belief as to all other matters, as follows:

**THE PARTIES**

1. Plaintiff, Lumintec, LLC (“Lumintec”), is a Texas limited liability corporation with a registered agent located at 1508 North Valley Mills Drive, Waco, Texas 76710.

2. On information and belief, Motorola is a Delaware limited liability company, with its principal place of business at 222 W. Merchandise Market Plaza Suite 1800, Chicago, Illinois 60654. Motorola may be served with process through its registered agent, CT Corporation System, at 1999 Bryan Street, Suite 900, Dallas, Texas 75201. Motorola is registered to do business in the State of Texas and has been since at least May 21, 2010.

3. On information and belief, Motorola regularly conducts and transacts business in the State of Texas, throughout the United States, and within this District, and as set forth below,

has committed and continues to commit, tortious acts of infringement within and outside the State of Texas and within this District.

#### **RELATED ENTITIES**

4. Lenovo (United States) Inc., is a Delaware corporation with a principal place of business at 1009 Think Place, Morrisville, North Carolina 27560 (“Lenovo US”).

5. Motorola Mobility Technology (China) Co., Ltd. is a company incorporated under the laws of the People’s Republic of China with a principal place of business at No. 1 Wangjing East Road, Chaoyang District, Beijing 100102, China (“Motorola China”).

6. Lenovo Group Ltd. is a company incorporated under the laws of the People’s Republic of China and having a principal place of business at No. 6 Chuang Ye Road, 2 Haidian District, Beijing, China 100085 (“Lenovo”). Lenovo Group directly and/or indirectly owns and controls Lenovo US, Motorola China, and Motorola.

#### **JURISDICTION AND VENUE**

7. Lumintec repeats and re-alleges the allegations in Paragraphs 1-6 as though fully set forth in their entirety.

8. This action is a civil action for patent infringement arising under the patent laws of the United States, Title 35, United States Code (“U.S.C.”) §1 et seq., including 35 U.S.C. §§ 271 and 281-285. This Court has exclusive subject matter jurisdiction over this case for patent infringement under 28 U.S.C. §§ 1331 and 1338.

9. Venue is proper in this District pursuant to 28 U.S.C. §§ 1400(b) and 1391(c).

10. Motorola is registered to do business in Texas, and upon information and belief, Motorola has transacted business in this District and has committed acts of direct and indirect infringement in this District by, among other things, importing, offering to sell, and selling products that infringe the asserted patents. Upon information and belief, Motorola has regular and

established places of business in the District in that Motorola offers repairs of Motorola devices at “Authorized Motorola Repair Centers,” which are physical places in the Western District of Texas sanctioned by Motorola to perform said repair services. (<https://motorola-global-portal.custhelp.com/app/mcp/trackrepair/service-center-locator> (*See* Exhibit 1). On information and belief, during the past year, Motorola has modified the page associated with this URL so that a sign-up/sign-in page is now displayed. (*See* Exhibit 1A). Once a customer signs up or signs in and reveals their location, Motorola will identify an Authorized Motorola Repair Center (Exhibit 1A, p. 3). On information and belief, the Authorized Motorola Repair Centers listed on Exhibit 1, CPR Austin – Lakeline and CPR Round Rock, are still in business at the identified locations (Exhibits 1B and 1C last visited September 22, 2021). On information and belief, the Authorized Motorola Repair Centers identified upon sign-up/sign-in still include the repair centers identified in Exhibit 1. Upon information and belief, these Authorized Motorola Repair Centers are dedicated to the service and support of Motorola products, including the Accused Products and such service being regularly performed by agents of Motorola in furtherance of Motorola’s business. Upon information and belief, Motorola also employs residents and advertises jobs in this District.

11. Motorola offers a limited warranty on its accused products. *See* Exhibit 2 (<https://help.motorola.com/hc/apps/settings/legal/global/en-us/index.html?t=CGT1507061106> (last visited September 22, 2021)). Per the Motorola limited warranty, Motorola describes covered repairs as those performed either by Motorola or “its authorized agent.” On information and belief, this is a reference to an Authorized Motorola Repair Center, because the document memorializing the terms of the warranty later describes repairs pursuant to a valid claim as being performed by “Motorola or its Authorized Service Provider.” On information and belief, Motorola pays its

Authorized Motorola Repair Centers for performing warranty repairs “in accordance with its role as an Authorized Motorola Repair Center.” On information and belief, Motorola directs its customers to Authorized Motorola Repair Centers and pays for repairs on Motorola’s behalf per its own warranty, the “role” of an Authorized Motorola Repair Center is clearly the role of an agent.

12. This Court has personal jurisdiction over Motorola by virtue of its systematic and continuous contacts with this jurisdiction, as alleged herein, as well as because the injury to Lumintec occurred in the State of Texas and the claim for relief possessed by Lumintec against Motorola for that injury arose in the State of Texas.

13. Motorola has continuous and systematic business contacts with the state of Texas. Motorola, directly or through subsidiaries or intermediaries (including distributors, retailers, and others), conducts its business extensively throughout Texas, by shipping, distributing, making, using, offering for sale, selling, and advertising (including the provision of interactive web pages) its products and services in the state of Texas and the Western District of Texas. Motorola, directly and through subsidiaries or intermediaries (including distributors, retailers, and others), has purposefully manufactured and voluntarily placed infringing products and services into this district and into the stream of commerce with the intention and expectation that they will be purchased and used by consumers in this district. Motorola has offered and sold and continues to offer and sell these infringing products and services in this District, including at physical Motorola stores located within this district. Motorola and its customers also commit additional acts of direct infringement in this district with respect to each asserted patent through their infringing use of the accused devices, including Motorola’s servers, in this district, including when Motorola and its customers put the accused devices into service and receive a benefit, and Motorola is liable for

these additional acts of direct infringement and indirect infringement in this district. Motorola has committed acts of infringement, both direct and indirect, in this district with respect to each asserted patent and has a regular and established place of business in this judicial district.

14. On information and belief, Motorola has purposely availed itself of the privileges of conducting business within the State of Texas, such business including but not limited to: (i) at least a portion of the infringements alleged herein; (ii) purposefully and voluntarily placing one or more infringing products into the stream of commerce with the expectation that they will be purchased by consumers in this forum; or (iii) regularly transacting or soliciting business, engaging in other persistent courses of conduct, or deriving or attempting to derive substantial revenue and financial benefits from goods and services provided to individuals residing in the State of Texas and in this District. Thus, Motorola is subject to this Court's specific and general personal jurisdiction under due process and the Texas Long Arm Statute.

15. Personal jurisdiction also exists specifically over Motorola because Motorola, directly or through subsidiaries or intermediaries (including customers, distributors, retailers, and others), subsidiaries, alter egos, and/or agents – ships, distributes, offers for sale, sells, imports, advertises, or markets in the State of Texas and in this District, one or more products that infringe the Patent-in-Suit, as described particularly below. Motorola has knowingly and purposefully shipped infringing products into and within this District through an established distribution channel. These infringing products have been and on information and belief continue to be purchased by consumers in this District. In addition, on information and belief, Motorola has found indirect ways to monetize consumers' use of its products, for example, by promoting consumers' adherence to Motorola's technological ecosystems and promoting sales of related Motorola products and by selling opportunities to advertise to consumers of its products.

16. On information and belief, Motorola, directly and/or through its customers has transacted business in this District and has committed acts of patent infringement in this District. Thus, venue is proper in this District under 28 U.S.C. §§ 1391 and 1400(b).

**BACKGROUND OF THE TECHNOLOGY AND THE PATENT-IN-SUIT**

17. Lumintec repeats and re-alleges the allegations in Paragraphs 1-16 as though fully set forth in their entirety.

18. United States Patent No. 8,724,983 (the “’983 Patent”) entitled “Flash Structure for the Camera Function of a Handheld Electronic Device” was duly and legally issued to Yang-Shan Yeh and Chi-Wei Tao (the “Inventors”) by the United States Patent and Trademark Office on May 13, 2014. A copy of the ‘983 Patent is attached hereto as Exhibit 3.

19. The ‘983 Patent is referred to in this Complaint as the “Patent-in-Suit”.

20. Lumintec is the sole owner and assignee of the entire right title and interest in the ‘983 Patent and has the right to sue and recover damages for any current or past infringement of the ‘983 Patent.

21. The inventions of the Patent-in-Suit originated from breakthrough work in the development of a camera flash structure, more particularly a flash structure for the camera function of a handheld electronic device.

22. The ‘983 Patent provides significant improvements to the flash of a smartphone camera. Prior to the ‘983 Patent, a smartphone flash suffered from the disadvantage of uneven light, especially when shooting close objects. The position of the flash module often resulted in uneven light and poor quality of photos and videos. As a result, the desired image often could not be obtained. The ‘983 Patent sets forth solutions to this problem thereby improving the quality of

photos, videos, and real-time images by way of novel structure that is simple, does not increase manufacturing costs, and improves the practicability of the flash module.

23. From at least 2011, the presence of a camera module was an essential component in every handheld electronic device. For instance, digital cameras, mobile phones, smartphones, tablet computers, personal digital assistant (PDA) devices and laptop computers all included at least a basic camera module that performed fundamental picture taking and videotaping functions.

24. Smartphone makers in particular paid attention to the performance of the camera module in their products. The camera module in many smartphones of that time enjoyed equivalent or even better performance than regular digital cameras.

25. In mobile phones of the time, the camera lens was commonly positioned on the back of the phone. An image sensor was installed inside the phone, while the camera lens was exposed externally. Flash modules were disposed close to the lens and included one or two light-emitting elements, or a light diffuser provided on a light emitting element. However, the location of such flash modules often resulted in uneven distribution of light, which diminished the anticipated quality of resulting pictures or videos.

26. The '983 Patent discloses a novel flash structure for the camera function of a handheld electronic device that enhances the picture, video, and real-time image quality of the camera, while having a simple construction without increasing the manufacturing cost.

27. In one form described in the '983 Patent, the novel flash structure includes an outer cover, an annular reflector, a light diffuser, and one or more fixed light emitting elements to provide continuous or intermittent supplemental light source. The center of the annular reflector passes the camera lens and is attached to the baseboard (motherboard) of the handheld electronic device. The annular reflector defines a through-slot. The one or more light-emitting elements are

embedded in the through-slot of the annular reflector, are arranged around the camera lens, and are electrically connected to the baseboard (motherboard). A light diffuser is disposed outside the annular reflector, outside the light-emitting element and positioned around the camera lens.

### **DEFENDANT'S KNOWLEDGE OF THE '983 PATENT**

28. Lumintec repeats and re-alleges the allegations in Paragraphs 1-27 as though fully set forth in their entirety.

29. Motorola is well aware of the '983 Patent and has continued its unauthorized infringing activity despite this knowledge. The inventors gave written notice to related entity Motorola China of the '983 Patent on or about April 22, 2015. The inventors attempted, albeit unsuccessfully, to actively engage in good faith negotiations with Motorola China and Motorola regarding licensing the '983 Patent. The inventors never received a reply.

30. Despite the inventors' best efforts, Motorola refused a license to the '983 Patent. On information and belief, Motorola had pre-suit knowledge of the '983 Patent and acted egregiously in that it did nothing to avoid infringement and, in fact, continued to manufacture and sell smartphones that infringe the '983 Patent.

### **OVERVIEW OF THE ACCUSED DEVICES**

31. Lumintec repeats and re-alleges the allegations in Paragraphs 1-28 as though fully set forth in their entirety.

32. The Motorola Moto X (2nd Gen) (the "Moto X") smartphone and the Google Nexus 6 (the "Nexus 6") smartphone (the "Accused Products") were both manufactured in the U.S. by Motorola after the '983 Patent issued. Motorola primarily manufactures smartphones and other mobile devices running the Android operating system developed by Google.



33. On information and belief, Motorola was formed on January 4, 2011, after a split of Motorola into two separate companies, with Motorola Mobility, LLC assuming the company's consumer-oriented product lines (including its mobile phone business, as well as its cable modems and pay television set-top boxes). In May 2012, Google acquired Motorola. Under Google, Motorola increased its focus on the entry-level smartphone market, and under the Google ATAP division, began development on Project Ara—a platform for modular smartphones with interchangeable components.

34. In January 2014, Google announced that it would sell Motorola to Lenovo for \$2.91 billion. The sale was completed on October 30, 2014. Lenovo disclosed an intent to use Motorola as a way to expand into the United States smartphone market. In August 2015, Lenovo's existing smartphone division was subsumed by Motorola.

35. The Moto X was announced by Motorola on September 5, 2014. The Nexus 6 was announced October 15, 2014 by Google in partnership with Motorola. It was the first 6-inch smartphone in the mainstream market and came with many high-end specifications. Its design was similar to the Moto X but with a larger display and dual, front-facing speakers rather than the single front-facing speaker on the Moto X.

36. On information and belief, Motorola manufactured the Moto X smartphone and the Nexus 6 smartphone and parts therefore at its plant in Fort Worth, Texas.

37. On information and belief, Motorola shipped the Moto X smartphone and the Nexus 6 smartphone and parts therefore to foreign countries including at least to the People's Republic of China.

38. On information and belief, in those cases where the Moto X phone and the Nexus 6 phone and parts were manufactured but not assembled in the U.S., the parts were shipped to

foreign countries including at least the People's Republic of China and there after assembled abroad.

39. Each of the Moto X and the Nexus 6 phones include a camera module positioned on the back of the phone.

40. On information and belief, the parts for the Moto X and the Nexus 6 phones manufactured in the U.S. and shipped unassembled to foreign countries included parts for the camera module to be positioned on the back of the phone.

**COUNT 1**  
**INFRINGEMENT OF U. S. PATENT NO. 8,724,983**

41. Lumintec repeats and re-alleges the allegations in Paragraphs 1 through 40 as if fully stated in this Count.

42. Motorola, either alone or in conjunction with the related entities identified above, or in conjunction with others, infringed and continue to infringe, both directly and indirectly, one or more claims of the '983 Patent under 35 U.S.C. § 271, either literally and/or under the doctrine of equivalents, by making, using, offering to sell, selling/licensing and/or importing into the United States the Moto X and Nexus 6 phones.

43. Motorola, either alone or in conjunction with the related entities, or in conjunction with others, infringed and continue to infringe, both directly and indirectly, one or more claims of the '983 Patent under 35 U.S.C. § 271, either literally and/or under the doctrine of equivalents, by making, using, offering to sell, selling/licensing parts for the Moto X and Nexus 6 phones in the U.S. that were thereafter exported to foreign countries and there after assembled.

44. The details of how the Moto X and Nexus 6 phones infringe each of the claims of the '983 Patent are set forth in attached Exhibits 4-5.

45. On information and belief, Motorola had knowledge of the '983 Patent since at least April 22, 2015. Alternatively, Motorola has had knowledge of the '983 Patent since at least April 22, 2015 when the inventors sent the notice of the '983 Patent to Motorola China.

46. Despite its knowledge and notice of the '983 Patent and its infringement of that patent, Motorola, either alone or in conjunction with the related entities, has continued to make, use, sell/license and/or offer to sell the Moto X and Nexus 6 phones and/or have continued to manufacture parts in the U.S. for the Moto X and Nexus 6 phones and shipped those parts to foreign countries for assembly. Motorola knew or should have known that its actions constituted infringement of the '983 Patent. Upon information and belief, Motorola has failed to take adequate steps to avoid infringing the '983 Patent, despite having been on notice of and lacking permission to practice the '983 Patent. Upon information and belief, Motorola has gained profits by virtue of its infringement of the '983 Patent will continue to reap significant revenues and savings based on its infringement of the '983 Patent. Accordingly, Lumintec is informed and believes, and on that basis alleges, that Motorola's infringement of the '983 Patent has been and continues to be intentional, willful in violation of Lumintec's exclusive rights.

47. Motorola, either alone or in conjunction with the related entities, has induced infringement, and continues to induce infringement, of one or more claims of the '983 Patent under 35 U.S.C. § 271(b). Motorola actively, knowingly, and intentionally induced, and continues to actively, knowingly and intentionally induce infringement of the '983 Patent by selling or otherwise making available and/or supplying the Moto X, the Nexus 6, or parts therefore, with the knowledge and intent that third parties will use the phones or assemble the parts to infringe the '983 Patent, and with the knowledge and intent to encourage and facilitate third party infringement through the dissemination of the Moto X, the Nexus 6, and parts therefore and/or the creation and

dissemination of promotional and marketing materials, supporting materials, instructions, product manuals, and/or technical information related to the Moto X, the Nexus 6, or parts therefore.

48. Motorola, either alone or in conjunction with the related entities, specifically intended and was aware that the ordinary and customary use of the Moto X, the Nexus 6, or assembly of the parts therefore would infringe the '983 Patent. Upon information and belief, Motorola, either alone or in conjunction with the related entities, further provides product manuals and other technical information that cause customers and other third parties to use and operate or assemble the Moto X and/or the Nexus 6 phones for their ordinary and customary use. Motorola's customers and other third parties have directly infringed the '983 Patent through the normal and customary use of the Moto X and the Nexus 6 phone, or the assembly of parts therefore. By providing instruction and training to customers and other third parties on how to use the Moto X and the Nexus 6 phones, and/or assemble the parts therefore in an infringing manner, Motorola, either alone or in conjunction with the related entities, specifically intended to induce infringement of the '983 Patent. Motorola has accordingly induced and continues to induce customers and other users in their ordinary and customary way to infringe the '983 Patent, knowing, or at least being willful blind to the fact, that such use constitutes infringement of the '983 Patent.

49. Motorola has contributed and continues to contribute to the infringement by others, including its customers, of the '983 patent under 35 U.S.C. § 271(c) by, among other things, manufacturing, selling, offering for sale within the United States and/or importing into the United the accused products for use in practicing the patented inventions of the '983 patent, knowing that the accused products and their components are especially made or adapted for use in infringement of the '983 patent, embody a material part of the inventions claimed in the '983 patent, and are not

staple articles of commerce suitable for substantial non-infringing use. Motorola's customers directly infringe the '983 patent by using the accused products.

50. Lumintec has been and continues to be damaged by Motorola's infringement of the '983 Patent.

51. Motorola's conduct in infringing the '983 Patent renders this case exceptional within the meaning of 35 U.S.C. § 285.

### **DEMAND FOR JURY TRIAL**

52. Pursuant to Rule 38 of the Federal Rules of Civil Procedure and Local Rule 38(a), Lumintec demands a trial by jury on all issues so triable.

### **PRAYER FOR RELIEF**

WHEREFORE, Lumintec prays for the following relief:

a) A judgment and order that Motorola has directly infringed (either literally or under the doctrine of equivalents) and/or induced the infringement of the '983 Patent;

b) A judgment and order permanently enjoining Motorola, its respective officers, directors, agents, servants, employees, attorneys, licensees, successors, and assigns and any other person(s) in active concert or participation with them from directly infringing the '983 Patent for the full term of that patent;

c) A judgment that the infringement of the '983 Patent by Motorola has been willful;

d) A judgment and order requiring Motorola to pay Lumintec an award of damages under 35 U.S.C. § 284, adequate to compensate Lumintec for Motorola's past infringement, but in no event less than a reasonable royalty, including enhanced damages as provided by 35 U.S.C. § 284, and supplemental damages for any continuing post-verdict infringement up until entry of the final judgment with an accounting, as needed, as well as damages for any continuing or future

infringement up to and including the date that Motorola is finally and permanently enjoined from further infringement;

e) A judgment and order requiring that in the event a permanent injunction preventing future acts of infringement is not granted, that Lumintec be awarded a compulsory ongoing licensing fee;

f) A judgment and order that this action be found an exceptional case pursuant to 35 U.S.C. § 285, entitling Lumintec to an award of all costs of this action, including attorneys' fees and interest;

g) A judgment and order requiring Motorola to pay Lumintec the costs of this action;

h) A judgment and order requiring Motorola to pay Lumintec pre-judgment and post-judgment interest on the damages award; and

i) Such other and further relief as the Court deems just and equitable.

Dated: September 24, 2021

Respectfully submitted,

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LUMINTEC, LLC**