

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

BRISTOL-MYERS SQUIBB CO. and	)	
ONO PHARMACEUTICAL CO., LTD.,	)	
	)	
Plaintiffs,	)	C.A. No. _____
	)	
v.	)	<b>JURY TRIAL DEMANDED</b>
	)	
MERCK & CO. INC.,	)	
	)	
Defendant.	)	
_____	)	

**COMPLAINT**

Plaintiffs Bristol-Myers Squibb Co. (“BMS”) and Ono Pharmaceutical Co., Ltd. (“Ono”) (collectively “Plaintiffs”), for their complaint for a declaratory judgment and other relief for patent infringement against Defendant Merck & Co. Inc. (“Defendant” or “Merck”), hereby allege as follows:

**INTRODUCTION**

1. According to the American Cancer Society, more than one million people in the United States are diagnosed with cancer each year (<http://www.cancer.org/cancer/index>). Cancer is a disease that results from the uncontrolled proliferation of cells that were once normal but have transformed into cancerous cells. Although a human’s natural immune system has the potential to eliminate cancerous cells, cancer cells have the ability to “turn off” the immune system thus allowing the cancer cells to continue to grow unchecked.

2. This case relates to a groundbreaking type of cancer treatment called “immunotherapy.” Treating cancer using immunotherapy is a scientific breakthrough and has the

potential to revolutionize cancer treatment by using a patient's own immune system to eliminate cancer cells.

3. T cells are an important part of the human immune system. In addition to eliminating foreign matter such as bacteria and viruses from a human body, they also help remove cancerous cells in the body. T cells carry a protein called PD-1 on their surface. PD-1 serves as an immune system checkpoint, shutting down the T cells' activity at the appropriate time to prevent an overactive immune response. Cancer cells can exploit the PD-1 protein's ability to trigger the immune checkpoint. When the PD-1 is triggered in this way, it shuts down or decreases the T cells' activity of removing the unwanted cancer cells from the body. Thus, the triggering of the PD-1 checkpoint can prevent a patient's immune system from destroying the cancer cells.

4. The invention at issue here covers using antibodies that bind to PD-1 ("anti-PD-1 antibodies") in a method for treating cancer. By binding to PD-1 and blocking the PD-1 checkpoint pathway, the anti-PD-1 antibodies allow a patient's immune system to resume its ability to recognize, attack, and destroy cancer cells.

5. The plaintiffs put this scientific breakthrough into practice by developing an anti-PD-1 antibody called nivolumab, the first anti-PD-1 antibody approved anywhere in the world for cancer treatment.

6. Merck is threatening to exploit that invention with a later-developed anti-PD-1 antibody. As described below, Merck is preparing to infringe plaintiffs' patent for methods of treating cancer with anti-PD-1 antibodies.

**PARTIES**

7. BMS is a corporation organized under the laws of the state of Delaware, with a principal place of business at 345 Park Ave., New York, New York 10154. Ono is a corporation organized under the laws of Japan, with a place of business at 8-2 Kyutaromachi 1-chrome, Chuo-ku, Osaka 541-8654, Japan.

8. On information and belief, Defendant Merck is a corporation organized under the laws of the state of New Jersey with a place of business at 1 Merck Dr., Whitehouse Station, New Jersey, 08889.

**JURISDICTION AND VENUE**

9. This is a declaratory judgment action pursuant to 28 U.S.C. §§ 2201-2202 for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 271 et seq.

10. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338.

11. This Court has personal jurisdiction over Merck because Merck is registered with the Delaware Department of State to transact business in Delaware and, upon information and belief, has systematic and continuous contacts in Delaware, does regularly transact business in Delaware, has derived substantial revenue from sales of pharmaceutical products in Delaware, and is expected to market its anti-PD-1 antibody product pembrolizumab in Delaware. On information and belief, Merck has repeatedly availed itself of the Delaware Courts.

12. Merck resides in this judicial district and venue is proper in this district under 28 U.S.C. §§ 1391(b), (c), and/or 1400(b).

**INVENTION OF METHODS FOR TREATING CANCER**

13. On May 20, 2014, the United States Patent & Trademark Office (“USPTO”) duly and legally issued United States Patent No. 8,728,474 (the “474 patent” (Exhibit 1)) titled “Immunopotentiative Composition.” The inventors of the 474 patent showed for the first time that anti-PD-1 antibodies were useful in methods to treat cancer. Ono is an assignee of the 474 patent. BMS is an exclusive licensee of the 474 patent. The 474 patent claims methods for treating cancer with an antibody against PD-1.

14. Plaintiffs have put the invention of the 474 patent into practice by developing the breakthrough biologic drug nivolumab. Nivolumab is a monoclonal antibody that recognizes and binds to the PD-1 protein. When nivolumab binds to the PD-1 protein, that PD-1 protein cannot interact with its natural binding partners. Using nivolumab to block the interaction between PD-1 and its binding partners allows a more robust T cell response by the patient’s own immune system.

15. Clinical testing of nivolumab confirms the remarkable promise of anti-PD-1 immunotherapy. After rigorous worldwide testing, on July 4, 2014, nivolumab became the first anti-PD-1 antibody approved anywhere in the world for treating cancer, when Japanese regulatory authorities approved nivolumab for the treatment of melanoma, a deadly form of skin cancer ([http://www.ono.co.jp/eng/news/pdf/sm\\_cn140704.pdf](http://www.ono.co.jp/eng/news/pdf/sm_cn140704.pdf)).

16. BMS and Ono are continuing worldwide development of nivolumab for treatment of a broad range of cancers, including non-small cell lung cancer, renal cell carcinoma, head and neck cancer, glioblastoma, and non-Hodgkin lymphoma. The United States Food and Drug Administration (“FDA”) granted Fast Track designation for nivolumab for treatment of melanoma, non-small cell lung cancer, and renal cell carcinoma (<http://news.bms.com/press->

release/rd-news/investigational-pd-1-immune-checkpoint-inhibitor-nivolumab-receives-us-fda-bre). The FDA has designated nivolumab as a Breakthrough Therapy for the treatment of certain patients with lymphoma (<http://news.bms.com/press-release/rd-news/investigational-pd-1-immune-checkpoint-inhibitor-nivolumab-receives-us-fda-bre>). BMS has announced that it expects to complete submission of its Biologics License Application (BLA) for nivolumab's use in treating non-small cell lung cancer by the end of 2014 (<http://news.bms.com/press-release/rd-news/bristol-myers-squibb-announces-plans-third-quarter-submission-biologics-licens>).

17. In Phase III clinical testing, patients with advanced melanoma who received nivolumab showed superior overall survival compared to those who did not, leading BMS to stop the clinical study early and make nivolumab available to all patients in the trial (<http://news.bms.com/press-release/phase-3-first-line-melanoma-study-nivolumab-investigational-pd-1-checkpoint-inhibitor->). Based on these clinical results, BMS has announced plans to submit its BLA for nivolumab in the United States for certain melanoma patients in the third quarter of 2014 (<http://news.bms.com/press-release/rd-news/bristol-myers-squibb-announces-plans-third-quarter-submission-biologics-licens>). Together, these clinical results confirm that the anti-PD-1 cancer treatments developed by the Plaintiffs can be used to save the lives of patients with a wide range of cancers.

### **MERCK'S INFRINGEMENT**

18. Merck is planning to exploit the invention of the 474 patent with an anti-PD-1 antibody called pembrolizumab. On information and belief, Merck started developing pembrolizumab after Plaintiffs had made and started testing nivolumab, and Merck has since been engaged in efforts to meet the FDA regulatory requirements for marketing, distributing,

offering for sale, and selling pembrolizumab for the treatment of cancer. According to Merck, pembrolizumab is a PD-1 antibody that works by blocking the PD-1 checkpoint to treat cancer.

19. On information and belief, Merck has known about the 474 patent and has known that the use of pembrolizumab will infringe claims of the 474 patent since at least approximately May 20, 2014, when the 474 patent was issued by the USPTO. In its August 7, 2014, 10-Q filing with the U.S. Securities and Exchange Commission (“SEC”), Merck acknowledged that the USPTO had granted the 474 patent (Merck & Co., Inc. U.S. Securities & Exchange Commission Form 10-Q at 22 (filed August 7, 2014)). In that same SEC filing, Merck admits that the use of pembrolizumab to treat cancer is covered by the European counterpart to the 474 patent (*id.* (“As previously disclosed, Ono Pharmaceutical Co. (“Ono”) has a European patent (EP 1 537 878) (“878”) that broadly claims the use of an anti-PD-1 antibody, such as the Company’s immunotherapy, pembrolizumab (MK-3475), for the treatment of cancer.”))).

20. Merck has had knowledge of the family of patents that includes the 474 patent for many years and has instituted legal proceedings seeking to invalidate the corresponding patents in Europe. Merck initiated an opposition proceeding against European Patent EP 1537878 (“EP 878 patent”), a European counterpart of the 474 patent, in the European Patent Office on June 20, 2011. Merck made numerous submissions in that opposition proceeding and an oral hearing was held on June 4, 2014. On information and belief, Merck’s outside counsel referred to the 474 patent during the oral hearing. That same day, the panel hearing oral argument rejected Merck’s opposition and held the EP 878 patent valid.

21. On May 22, 2014, Merck filed a revocation action in the United Kingdom seeking to revoke the U.K. patent corresponding to the EP 878 patent. BMS has filed a counterclaim alleging infringement by pembrolizumab in that action.

22. On information and belief, Merck received approval from the FDA on September 4, 2014 to market pembrolizumab as a treatment for certain patients with melanoma. Merck's pembrolizumab is especially made for use in infringing the 474 patent and has no substantial non-infringing uses. By virtue of obtaining approval to market and sell pembrolizumab as a treatment for certain patients with melanoma, Merck has the specific intent to cause infringement of the 474 patent or, at a minimum, Merck has been willfully blind to the infringement of the 474 patent that will inevitably result.

23. On information and belief, Merck either has begun efforts to produce substantial supplies of pembrolizumab in anticipation of an imminent launch in the United States, and/or will soon begin manufacturing, distributing, using, offering for sale, selling, and/or importing in the United States the pembrolizumab antibody product to be prescribed and used for the treatment of cancer.

**COUNT FOR DECLARATORY JUDGMENT OF PATENT INFRINGEMENT**

24. Plaintiffs incorporate by reference paragraphs 1-23 as if fully set forth herein.

25. As set forth above, a real, immediate, substantial, and justiciable controversy has arisen and now exists between the parties under the Declaratory Judgment Act, 28 U.S.C. §§ 2201-2202.

26. Defendant Merck is actively preparing to and will imminently infringe the 474 patent. As set forth above, on information and belief, by making meaningful preparations to market, make, use, sell, offer for sale, and/or import pembrolizumab in the United States for the treatment of cancer, Merck will imminently infringe the 474 patent, including by actively inducing infringement under 35 U.S.C. § 271(b) and as a contributory infringer under 35 U.S.C. § 271(c).

27. On information and belief, Merck has been aware of the 474 patent since at least approximately May 20, 2014, when the USPTO issued the 474 patent and Merck's imminent infringement is deliberate, willful, and in reckless disregard of valid patent claims of the 474 patent.

28. Plaintiffs will be injured by and will suffer substantial damages as a result of Merck's imminent infringement.

**JURY DEMAND**

Under Federal Rule of Civil Procedure 38, Plaintiffs demand trial by jury of all issues so triable.

**PRAYER FOR RELIEF**

Wherefore, Plaintiffs respectfully request the following relief:

(a) entry of a declaratory judgment that Defendant infringes and will infringe the 474 patent;

(b) an award of damages sufficient to compensate Plaintiffs for infringement of the 474 patent, together with pre- and post-judgment interest and costs as fixed by the Court as provided by 35 U.S.C. § 284;

(c) entry of an order compelling Defendant to compensate Plaintiffs for any ongoing or future infringement of the 474 patent, in an amount and under terms appropriate for the circumstances;

(d) entry of an order that Defendant's infringement has been willful, and increased damages pursuant to 35 U.S.C. § 284;



(e) judgment that this is an exceptional case pursuant to 35 U.S.C. § 285 and an award to Plaintiffs of their reasonable attorney fees, costs, and expenses in this action pursuant to 35 U.S.C. § 285;

(f) such other relief as the Court may deem just and proper.

Dated: September 4, 2014

Respectfully submitted,

FARNAN LLP

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