

# United States Court of Appeals for the Federal Circuit

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**M-I DRILLING FLUIDS UK LTD., M-I LLC,**  
*Plaintiffs-Appellants*

v.

**DYNAMIC AIR LTDA.,**  
*Defendant-Appellee*

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2016-1772

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Appeal from the United States District Court for the  
District of Minnesota in No. 0:13-cv-02385-ADM-HB,  
Judge Ann D. Montgomery.

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Decided: May 14, 2018

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TX, argued for plaintiffs-appellants. Also represented by  
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Before REYNA, HUGHES, and STOLL, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* HUGHES.

Concurring opinion filed by *Circuit Judge* REYNA.

HUGHES, *Circuit Judge*.

M-I Drilling Fluids U.K. Ltd. and M-I LLC sued Dynamic Air Ltda. in the U.S. District Court for the District of Minnesota, alleging infringement of five U.S. patents. The district court dismissed the case for lack of personal jurisdiction. Because Rule 4(k)(2) of the Federal Rules of Civil Procedure supports the exercise of specific personal jurisdiction over Dynamic Air Ltda., we reverse and remand for further proceedings.

## I

M-I Drilling is a private limited company organized under the laws of the United Kingdom and has its principal place of business in the United Kingdom. M-I LLC (together with M-I Drilling, M-I) is a U.S. company incorporated in Delaware with its principal place of business in Texas. M-I supplies systems and equipment used in handling drilling waste created, for instance, around oil rigs in offshore oil exploration platforms.

Relevant here, M-I Drilling owns five U.S. patents—U.S. Patent Nos. 6,702,539 B2, 6,709,217 B1, 7,033,124 B2, 7,186,062 B2, and 7,544,018 B2 (the asserted patents). M-I LLC is an exclusive licensee of the asserted patents. The patents are generally directed to methods, systems, and apparatuses used in the collection, conveyance, transportation, and storage of drilling waste created around undersea oil wells. The patents are claimed to cover, among other things, pneumatic conveyance systems installed around oil drilling rigs and used to transfer drill cuttings from the oil rigs to receiving ships.

Dynamic Air Ltda. (DAL) is a corporation organized under the laws of Brazil and has its principal place of business in Brazil. DAL is a subsidiary of Dynamic Air

Inc. (DAI), a Minnesota corporation with its principal place of business in Minnesota.

Between October 2011 and January 2012, the Brazilian state-owned oil company *Petróleo Brasileiro S.A.* (Petrobras) requested proposals for the installation of pneumatic conveyance systems on ships to assist in the removal of waste created by drilling undersea oil wells. M-I Swaco do Brasil – Comércio Serviços e Mineração Ltda., M-I Drilling’s “sister company and customer” in Brazil, and DAL both submitted their proposals. J.A. 13. DAL won the bid and thereafter designed, manufactured, and operated at least three pneumatic conveyance systems. In February 2013, DAL installed a conveyance system that pneumatically conveyed drill cuttings from “P-59,” an offshore oil drilling rig, onto the *HOS Resolution*, a U.S.-flagged ship. In August 2013, DAL installed a similar conveyance system on board the *HOS Pinnacle*, another U.S.-flagged ship, to remove drill cuttings from “P-III,” another offshore oil drilling rig.

M-I then sued DAL in the U.S. District Court for the District of Minnesota, alleging that DAL infringed the asserted patents by making, selling, and operating pneumatic conveyance systems such as those on the *HOS Pinnacle* and the *HOS Resolution*. DAL moved to dismiss for lack of personal jurisdiction under Rule 12(b)(2), arguing that the district court could not exercise specific personal jurisdiction over it under Rule 4(k)(2) consistent with due process. The district court granted that motion and dismissed the case after finding that, although the alleged infringing activities took place on U.S.-flagged ships that are themselves U.S. territory, the contract between Petrobras and DAL did not identify the ships on which DAL would be required to make installations. As such, in the district court’s view, DAL did not purposefully avail itself of the privilege of conducting activities within the United States because its contacts with the *HOS Pinnacle* and the *HOS Resolution* were exclusively

due to the unilateral activity of Petrobras. J.A. 19–20. The court also concluded that the exercise of specific personal jurisdiction over DAL would neither be reasonable nor fair. J.A. 22–25.

M-I appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

## II

Personal jurisdictional issues in patent infringement cases are reviewed de novo and under our precedent. *Synthes (U.S.A.) v. G.M. Dos Reis Jr. Ind. Com de Equip. Medico*, 563 F.3d 1285, 1293 (Fed. Cir. 2009).

Where, as here, a “district court’s disposition as to the personal jurisdictional question is based on affidavits and other written materials in the absence of an evidentiary hearing, a plaintiff need only to make a *prima facie* showing that defendants are subject to personal jurisdiction.” *Elecs. for Imaging, Inc. v. Coyle*, 340 F.3d 1344, 1349 (Fed. Cir. 2003). Moreover, “[i]n the procedural posture of a motion to dismiss, a district court must accept the uncontroverted allegations in the plaintiff’s complaint as true and resolve any factual conflicts in the affidavits in the plaintiff’s favor.” *Id.*; see *Graphic Controls Corp. v. Utah Med. Prods., Inc.*, 149 F.3d 1382, 1383 n.1 (Fed. Cir. 1998) (noting that the district court’s task in evaluating whether the plaintiff has made a *prima facie* showing of personal jurisdiction over the defendant requires construing the pleadings and affidavits in the light most favorable to the plaintiff).

Rule 4(k)(2) allows “a court to exercise personal jurisdiction over a defendant if (1) the plaintiff’s claim arises under federal law, (2) the defendant is not subject to jurisdiction in any state’s courts of general jurisdiction, and (3) the exercise of jurisdiction comports with due process.” *Synthes*, 563 F.3d at 1293–94. “The third requirement under Rule 4(k)(2)—the due process analy-

sis—contemplates a defendant’s contacts with the entire United States, as opposed to the state in which the district court sits.” *Id.* at 1295. “Rule 4(k)(2), therefore, serves as a federal long-arm statute, which allows a district court to exercise personal jurisdiction over a foreign defendant whose contacts with the United States, but not with the forum state, satisfy due process.” *Id.* at 1296.

Here, the parties only dispute the third requirement—whether exercise of personal jurisdiction over DAL comports with due process. “[D]ue process requires only that in order to subject a defendant to a judgment in personam, [the defendant must] have certain minimum contacts with [the forum] such that the maintenance of the suit does not offend ‘traditional notions of fair play and substantial justice.’” *Int’l Shoe Co. v. Washington*, 326 U.S. 310, 316 (1945) (quoting *Milliken v. Meyer*, 311 U.S. 457, 463 (1940)). “Depending on their nature and number, a defendant’s contacts with a forum can provide a court with general jurisdiction or specific jurisdiction.” *Synthes*, 563 F.3d at 1297. M-I asserts only specific personal jurisdiction. Relevant to that determination, we apply a three-part test considering whether: (1) the defendant purposefully directed its activities at residents of the forum; (2) the claim arises out of or relates to the defendant’s activities with the forum; and (3) assertion of personal jurisdiction is reasonable and fair. *Id.* The plaintiff bears the burden as to the first two requirements, and if proven, the burden then shifts to the defendant to “present a compelling case that the presence of some other considerations would render jurisdiction unreasonable.” *Burger King Corp. v. Rudzewicz*, 471 U.S. 462, 477 (1985); *Grober v. Mako Prods., Inc.*, 686 F.3d 1335, 1346 (Fed. Cir. 2012).

The district court found here that DAL’s contacts with the *HOS Pinnacle* and the *HOS Resolution* were “due to the unilateral activity of [Petrobras] and random insofar

as [they were] completely dependent on Petrobras’s direction.”<sup>1</sup> J.A. 19. Because Petrobras “had exclusive control over where the accused systems were installed,” *id.*, the district court concluded that DAL had not “purposefully availed itself of the privilege of conducting activities’ within the United States,” J.A. 19–20. To bolster its analysis, the court relied on *Bellisio Foods, Inc. v. Prodo Pak Corp.*, a breach of contract action in which the district court concluded that the defendants had not purposefully directed their activities to Minnesota because the plaintiff asked for contract performance in Minnesota after negotiations over the contract formation had concluded. No. 07-CV-4520(PJS/JJG), 2008 WL 4867352, at \*6–9 (D. Minn.

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<sup>1</sup> The district court decided in a related action between M-I and DAI (DAL’s parent entity) that U.S. territory extends to the *HOS Pinnacle* and the *HOS Resolution*. DAL did not dispute that issue in its Rule 12(b)(2) motion. J.A. 18 n.14; *see also* J.A. 421. “It is the general rule . . . that a federal appellate court does not consider an issue not passed upon below.” *Singleton v. Wulff*, 428 U.S. 106, 120 (1976). Our precedent generally counsels against entertaining arguments not presented to the district court. *Sage Prod., Inc. v. Devon Indus., Inc.*, 126 F.3d 1420, 1426 (Fed. Cir. 1997) (“In short, this court does not ‘review’ that which was not presented to the district court.”); *see also Harris Corp. v. Ericsson Inc.*, 417 F.3d 1241, 1251 (Fed. Cir. 2005) (“An appellate court retains case-by-case discretion over whether to apply waiver.”). Because M-I alleged that U.S.-flagged ships themselves are U.S. territory for the purposes of patent law; DAL affirmatively assumed so in its motion to dismiss for lack of personal jurisdiction; the district court accepted that assumption in deciding the motion; and DAL’s brief here does not provide any reason why it failed to argue this issue below, we deem the issue waived.

Nov. 4, 2008). M-I argues that the court's analysis is inconsistent with our relevant precedent. We agree.

Our subject matter jurisdiction over this appeal is grounded in the commercial tort of patent infringement, not a contract dispute between the parties. In patent infringement disputes, our precedent makes clear that “the jurisdictional inquiry is *relatively easily* discerned from the nature and extent of the commercialization of the accused products or services by the defendant in the forum.” *Avocent Huntsville Corp. v. Aten Int’l Co.*, 552 F.3d 1324, 1332 (Fed. Cir. 2008) (emphasis added). We have held, for instance, that a Brazilian defendant purposefully directed its allegedly infringing activities to the United States where its representative brought the accused products into the United States from Brazil to display the items at a trade show. *Synthes*, 563 F.3d at 1297–98; *accord Nuance Commc’ns, Inc. v. Abby Software House*, 626 F.3d 1222, 1234 (Fed. Cir. 2010) (“Abby Production has purposefully imported the accused products into California, made those products available for sale through an established distribution chain, and the cause of action for patent infringement is alleged to arise out of these activities. No more is required for specific jurisdiction.”); *Beverly Hills Fan Co. v. Royal Sovereign Corp.*, 21 F.3d 1558, 1565 (Fed. Cir. 1994) (“The allegations are that defendants purposefully shipped the accused fan into Virginia through an established distribution channel. The cause of action for patent infringement is alleged to arise out of these activities. No more is usually required to establish specific jurisdiction.”). Indeed, “even a single contact with a forum state may suffice for personal jurisdiction if it is directly and substantially related to the plaintiff’s claim” of patent infringement. *Red Wing Shoe Co. v. Hockerson-Halberstadt, Inc.*, 148 F.3d 1355, 1359 (Fed. Cir. 1998). Here, it is undisputed that DAL installed pneumatic conveyance systems on the *HOS Pinnacle* and the *HOS*

*Resolution.* DAL then deliberately continued to engage in the allegedly infringing activities aboard the ships even after M-I had cautioned DAL that its systems infringed the asserted patents. J.A. 1344 ¶ 33; *see also* J.A. 392 ¶¶ 25–26, 35, 38; J.A. 1341 ¶¶ 23–24. Nothing more is required to show that DAL purposefully directed its activities at the United States.

The district court erroneously focused on the contract between Petrobras and DAL. Even if the contract directed where the accused systems were installed and operated, DAL controlled the specifics of its own continued performance under the contract. There is no evidence, for instance, that Petrobras contractually required DAL to use allegedly infringing components when the latter fabricated the pneumatic conveyance systems on the U.S.-flagged ships. Moreover, DAL, not Petrobras, kept the systems operating on the *HOS Resolution* through September 2015, and on the *HOS Pinnacle* through August 2015. J.A. 1341 ¶¶ 23–24. Such deliberate presence of DAL and its systems in the United States enhance its affiliation with the forum and “reinforce the reasonable foreseeability of suit there.” *Burger King*, 471 U.S. at 476. Far from being “random, fortuitous, or attenuated,” *id.* at 480, the totality of DAL’s contacts aboard the ships compels the conclusion that DAL purposefully directed its activities at the United States.

Although the district court did not address the issue, it is undisputed that M-I’s claims for patent infringement arise from or relate to DAL’s accused infringing activities in the United States. Accordingly, M-I has met its burden to make a *prima facie* showing that DAL is subject to specific personal jurisdiction in a U.S. court.

Because DAL’s activities were purposefully directed at the United States and the claim of patent infringement arises out of those contacts, the burden now shifts to DAL to present a “compelling case that the presence of some



other considerations would render jurisdiction unreasonable.” *Id.* at 477. In determining whether the exercise of specific personal jurisdiction over a defendant would be reasonable and fair, we consider five due process factors: (1) the burden on the defendant; (2) the forum’s interest in adjudicating the dispute; (3) the plaintiff’s interest in obtaining convenient and effective relief; (4) the interstate judicial system’s interest in obtaining the most efficient resolution of controversies; and (5) the shared interest of the states in furthering fundamental substantive social policies. *Id.* Given that M-I LLC, one of the allegedly injured parties and the exclusive licensee of the asserted patents, is a U.S. domiciliary, it has a paramount interest in obtaining convenient and effective relief in a U.S. court. Indeed, *Synthes*, a close factual analog to the instant case, compels that conclusion.

*Synthes* involved a patent infringement suit filed by a U.S. plaintiff against a Brazilian company (GMReis). 563 F.3d at 1297. GMReis had no office, subsidiary, or licensee in the United States. We applied Rule 4(k)(2), and held that the entire United States was an available forum. *Id.* at 1300. We acknowledged that the burden on GMReis was “significant,” given that it would have been “required to traverse the distance between its headquarters in Brazil and the district court in California,” and would have been “required to submit itself to a foreign nation’s judicial system.” *Id.* at 1299. We observed, however, that “progress in communications and transportation has made the defense of a lawsuit in a foreign tribunal less burdensome.” *Id.* (quoting *World-Wide Volkswagen Corp. v. Woodson*, 444 U.S. 286, 294 (1980)). Balancing the factors, we held that any burden on GMReis was “sufficiently outweighed by the interest of the United States in adjudicating the dispute and the interest of *Synthes* [the patent owner] in obtaining effective and convenient relief, the second and third due process factors. The United States has a ‘substantial interest’ in

enforcing the federal patent laws.” *Id.* (emphasis added). So too here. Because M-I LLC is a U.S. plaintiff trying to enforce its U.S. patents for alleged infringing activity in a U.S. territory,<sup>2</sup> in light of *Synthes*, the first three factors strongly favor exercising specific personal jurisdiction over DAL. See *N. Am. Philips Corp. v. Am. Vending Sales, Inc.*, 35 F.3d 1576, 1580 (Fed. Cir. 1994) (noting that the forum “clearly has an interest in prohibiting the importation of infringing articles into its territory”); *Beverly Hills Fan*, 21 F.3d at 1568 (holding that the forum’s interest in discouraging injuries within its territory extends to patent infringement actions).

The fourth and the fifth due process factors “are concerned with the potential clash of substantive social policies between competing fora and the efficiency of a resolution to the controversy.” *Synthes*, 563 F.3d at 1300. But the forum here is the entire United States, so no competing U.S. forum is available to M-I for its infringement claims. As such, no other U.S. forum exists with respect to which there is a clash of social policies or with which to compare the efficiency of a resolution. And to the extent we give any weight to the procedural and substantive interests of other nations in the context of Rule 4(k)(2), “we have no reason to believe that ‘the Federal Government’s interest in its foreign relations policies’ with Brazil will be hindered by allowing the district court to exercise personal jurisdiction” over DAL. *Id.* (quoting *Asahi Metal Indus. Co. v. Super. Ct. of Cal.*, 480 U.S. 102, 115 (1987)).

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<sup>2</sup> As noted in footnote 1, DAL waived its argument that the alleged infringing activity occurred outside the United States.

On balance, this is not one of those “rare cases” in which fair play and substantial justice defeat the reasonableness of a U.S. court exercising personal jurisdiction over a defendant. *Id.*; *cf. Tech. Patents, LLC v. Deutsche Telekom AG*, 573 F. Supp. 2d 903 (D. Md. 2008) (finding that due process limits the court from exercising personal jurisdiction over 131 foreign defendants because haling those telecom defendants into the court for the action of its subscribers would have a “chilling effect” given the far-reaching nature of the messaging technology that would ensnare nearly every telecom company in the world), *aff’d*, 700 F.3d 482 (Fed. Cir. 2012), *cert. denied*, 134 S. Ct. 67 (2013). Accordingly, DAL has not met its burden to present a compelling case that the assertion of personal jurisdiction over it is unreasonable or unfair under the five due process factors.

### III

For the foregoing reasons, we conclude that exercising specific personal jurisdiction over DAL under Rule 4(k)(2) comports with due process. We thus reverse the district court’s dismissal for lack of personal jurisdiction and remand for further proceedings.

### **REVERSED AND REMANDED**

Costs to appellants.

# United States Court of Appeals for the Federal Circuit

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REYNA, *Circuit Judge*, concurring.

I join the majority and agree that Rule 4(k)(2) supports finding that the district court can exercise specific personal jurisdiction over Dynamic Air Ltda. (“DAL”) in this case. Fed. R. Civ. P. 4(k)(2). I also agree that DAL has waived the issue of whether U.S. patent laws extend to U.S.-flagged ships on the high seas, but find that the broader issue of territoriality still weighs heavily in this case. I write to provide additional reasoning why the exercise of personal jurisdiction here does not offend traditional notions of fair play and substantial justice. *See Burger King Corp. v. Rudzewicz*, 471 U.S. 462, 476 (1985).

“The unique burdens placed upon one who must defend oneself in a foreign legal system should have significant weight in assessing the reasonableness of stretching the long arm of personal jurisdiction over *national borders*.” *Asahi Metal Ind. Co., v. Superior Court of Cal., Solano Cty.*, 480 U.S. 102, 114 (1987) (emphasis added). This emphasis on “national borders” is central to Rule 4(k)(2)(B) considerations. For example, prong three of the Rule 4(k)(2)(B) inquiry (i.e., the requirement that assertion of personal jurisdiction must comport with due process) requires the court to consider five factors: (1) the burden on the defendant; (2) the forum’s interest in adjudicating the dispute; (3) the plaintiff’s interest in obtaining convenient and effective relief; (4) the interstate judicial system’s interest in obtaining the most efficient resolution of controversies; and (5) the shared interest of the states in furthering fundamental substantive social policies. *Burger King*, 471 U.S. at 477. Each of these factors raises the issue of the relationship between territoriality and U.S. patent law. The majority opinion also emphasizes the interest of the United States in enforcing its patent laws within its territories, an assertion that, in particular, implicates the territoriality issue. *See* Maj. Op. at 9–10.

#### U.S. PATENT LAW ON THE HIGH SEAS

The crux of DAL’s position that U.S. patent laws do not extend to U.S.-flagged ships in international waters rests on the notion that “the law of the flag doctrine ‘is a figure of speech, a metaphor,’” and therefore a merchant ship is not part of the territory of the country whose flag she flies.<sup>1</sup> Appellee’s Br. 52 (quoting *Cunard S.S. Co. v.*

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<sup>1</sup> The alleged infringement in this case occurred in the exclusive economic zone (“EEZ”) of Brazil. The EEZ is “an area beyond and adjacent to the territorial sea’ which ‘shall not extend beyond 200 nautical miles from the

*Mellon*, 262 U.S. 100, 123 (1923)). DAL thus seeks a categorical rule that because general statutes do not normally apply extraterritorially, U.S. patent laws can never apply to U.S.-flagged ships in international waters. I disagree with DAL's all-or-nothing argument.

There is no dispute that a ship's flag does not transform a ship into terra firma of the country whose flag she flies. That this "floating island" metaphor was once used does not displace the law of the flag's well-settled role in determining what nation's law applies to disputes aboard a ship. See William Tetley, Q.C., *The Law of the Flag, "Flag Shopping," and Choice of Law*, 17 Tul. Mar. L.J. 139, 140–47 (1993). Accordingly, the Supreme Court has recognized that the "well-established rule of international law that the law of the flag state ordinarily governs the internal affairs of a ship." *McCulloch v. Sociedad Nacional de Marineros de Honduras*, 372 U.S. 10, 21 (1963); see *Hellenic Lines Ltd. v. Rhoditis*, 398 U.S. 306, 312 (1970) (recognizing the "well-settled principle that the law of the country whose flag a ship flies governs ship-board transactions, absent some 'clear expression' from Congress to the contrary"). This sentiment is echoed by

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baselines from which the breadth of the territorial sea is measured." Elizabeth I. Winston, *Patent Boundaries*, 87 Temp. L. Rev. 501, 508 (2015) (quoting the United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 397, 418–19 (arts. 55, 57)). The United States has adopted the same definition of the exclusive economic zone in 1983 by Presidential Proclamation. *Id.* (citing Proclamation No. 5030, 48 Fed. Reg. 10,605 (Mar. 10, 1983)). In the EEZ, a nation has minimal sovereign rights. For example, the United States "possesses sovereign rights in economic exploitation of natural resources and jurisdiction over marine scientific research." *Patent Boundaries*, 87 Temp. L. Rev. at 508.

the Restatement (Third) of Foreign Relations Law § 502(2) (Am. Law Inst. 1987), which provides that “[t]he flag state may exercise jurisdiction to prescribe, to adjudicate, and to enforce, with respect to the ship or any conduct that takes place on the ship.” The law of the flag also holds a long-standing role in determining the jurisdiction of disputes on the high seas. *See Patent Boundaries*, 87 Temp. L. Rev. at 522 (“The law of the flag does protect United States-flagged ships, which have long represented an extension of the sovereignty of the United States to the high seas.”); *see also Cunard*, 262 U.S. at 123 (stating that the law of the flag is “chiefly applicable to ships on the high seas, where there is no territorial sovereign . . .”); *United States v. Sanford Ltd.*, 880 F. Supp. 2d 9, 16 (D.D.C. 2012) (recognizing that the law of the flag serves “as a tiebreaker of sorts for areas of the world (e.g., the high seas) where there is no territorial sovereign”).

In the seminal maritime case *Lauritzen v. Larsen*, the Supreme Court identified the law of the flag as one of seven factors for a court to consider in choosing which law governs aboard a ship, stating:

This Court has said that the law of the flag supersedes the territorial principle, even for purposes of criminal jurisdiction of personnel of a merchant ship, because it “is deemed to be a part of the territory of that sovereignty (whose flag it flies), and not to lose that character when in navigable waters within the territorial limits of another sovereignty.” On this principle, we concede a territorial government involved only concurrent jurisdiction of offenses aboard our ships. Some authorities reject, as a rather mischievous fiction, the doctrine that a ship is constructively a floating part of the flagstate, but apply the law of the flag on the pragmatic basis that there must be some law on shipboard, and it cannot change at every change

of waters, and no experience shows a better rule than that of the state that owns her.

345 U.S. 571, 585 (1953) (citation omitted). The dispute in *Lauritzen* involved a suit for a Danish seaman's negligent injuries against a Danish owner of a Danish vessel anchored in Cuban waters off Havana, Cuba. *Id.* at 573. Despite the fact that the injuries occurred in Cuban waters, the Court found Danish law applied chiefly based on the law of the flag, stating the doctrine has "such weight," that "it must prevail unless some heavy counterweight appears." *Id.* at 586. In addition to the law of the flag, the *Lauritzen* Court identified six other factors for a court to consider in determining what law applies aboard a ship: (1) place of the wrongful act; (2) allegiance or domicile of the injured; (3) allegiance of the ship owner; (4) place of contract; (5) inaccessibility of foreign forum; and (6) the law of the forum. *Id.* at 583–91. *Lauritzen* calls for a case-by-case, not a categorical, approach, to the question at hand—here, whether the specific U.S.-registered and flagged ships at issue, the *HOS Pinnacle* and *HOS Resolution*, are U.S. territory for purposes of the Patent Act.

International and maritime law also provide support for using the law of the flag as a dispositive factor in deciding whether a ship constitutes "territory" for purposes of jurisdiction. While the United States is not a party to the United Nations Convention on the Law of the Sea, the document is nevertheless informative. Article 92 provides that "[s]hips shall sail under the flag of one State only and save, in exceptional cases expressly provided for in international treaties or in this Convention, shall be subject to its *exclusive jurisdiction* on the high seas." Dec. 10, 1982, 1833 U.N.T.S. 397, 433 (emphasis added). In that same current, U.S. vessel registration requirements to obtain that flag amplify the law of the flag's importance in determining a merchant ship's nationality. *See Lauritzen*, 345 U.S. at 584 ("Each state under international



law may determine for itself the conditions on which it will grant its nationality to a merchant ship, thereby accepting responsibility for it and acquiring authority over it. Nationality is evidenced to the world by the ship's papers and its flag."). The United States has the most stringent registration requirements in the world. See H. Edwin Anderson, III, *The Nationality of Ships and Flags of Convenience: Economics, Politics, and Alternatives*, 21 Tul. Mar. L.J. 139, 151–52 (1996). For example, on a U.S.-flagged ship, only an American citizen may serve as captain, chief engineer, radio officer, deck watch officer and engineering officer. *Id.* In addition, only twenty-five percent of the unlicensed crew may be foreign. *Id.* To that effect, U.S. Coast Guard regulations provide that a Certificate of Documentation for a ship "serves as evidence of a vessel[s] nationality." 46 C.F.R. § 67.1. And a Certificate of Documentation for a vessel may only be issued to vessels "which are wholly owned by United States citizens." *Id.* § 67.30. Thus, a ship's flag and corresponding registration requirements are critical when assessing what nation's law applies to conduct, or a dispute, on a ship.

Turning to the Patent Act itself, 35 U.S.C. § 154(a) defines a patent owner's right to "exclude others from making, using, offering for sale, or selling the invention throughout the United States, or importing the invention into the United States . . . ." Section 100(c) defines the "United States" to mean "the United States of America, its territories and possessions." Prior to the enactment of the 1952 Act, the only authority speaking on whether U.S. patent laws apply to U.S.-flagged ships on the high seas was *Gardiner v. Howe*, an 1865 case from then-existing Circuit Court of the District of Massachusetts. 9 F. Cas. 1157 (C.C.D. Mass. 1865). In *Gardiner*, the asserted patent claimed an improvement in the sails of vessels. *Id.* at 1157. The accused infringer allegedly used the improvement on the sails of his U.S.-flagged vessel while on

the high seas and argued at trial that he could not be held liable for infringement because U.S. patent laws did not apply on the high seas. *Id.* The court disagreed, stating that the U.S. patent laws “extend[] to the decks of American vessels on the high seas, as much as it does to all the territory of the country, and for many purposes is even more exclusive.” *Id.* at 1158. The court reasoned that any contrary ruling would render valueless “patents for improvements in the tackle and machinery of vessels, or in their construction . . . .” *Id.* Our predecessor court recognized the vitality of *Gardiner* in *Marconi Wireless Telegraph Co. of America v. United States*, when it held that U.S. patent laws extend to infringing acts at the American Legation at Peking in China. 99 Ct. Cl. 1, 67–68 (1942).

Nothing in the legislative history of the 1952 Patent Act evidences congressional intent to narrow the territorial scope of the patent laws from that articulated in *Gardiner*. See S. Rep. 101-266 (1990), as reprinted in 1990 U.S.C.C.A.N. 4058, 4060 (noting that the language of § 100(c) was “intended to be descriptive rather than limiting”). Rather, the sole justification given for including § 100(c) was “to avoid the use of long expressions in various parts of the revised title.” S. Rep. 82-1979 (1952), as reprinted in 1952 U.S.C.C.A.N. 2394, 2409. To that point, when Congress considered the 1952 Act, Senator Pat McCarran explained that the legislation was not intended to change existing law in any way, but to “codif[y] the present patent laws.” 98 Cong. Rec. 9323 (daily ed. July 4, 1952). Absent evidence that Congress intended the 1952 Act to alter the territorial reach of the U.S. patent laws, *Gardiner* remains persuasive. *Midlantic Nat. Bank v. N.J. Dep’t of Environ. Prot.*, 474 U.S. 494, 501 (1986) (“The normal rule of statutory construction is that if Congress intends for legislation to change the interpretation of a judicially created concept, it makes

that intent specific.”); *Shaw v. Railroad Co.*, 101 U.S. 557, 565 (1879) (similar).

In 1990, Congress applied the logic expressed by the *Gardiner* court in drafting legislation to extend U.S. patent law to U.S. spaceships. 1990 U.S.C.C.A.N. 4058, 4060–62. Specifically, in passing the Inventions in Outer Space Act, Congress recognized that absent language extending U.S. patent laws to U.S. spaceships, patent owners would be “unable to enjoin or collect damages for infringing activities in outer space,” which “may chill prospects for commercial investment in outer space research and manufacturing.” *Id.* at 4062. Section 105 of Title 35 thus provides that “[a]ny invention made, used or sold in outer space on a space object or component thereof under the jurisdiction or control of the United States shall be considered to be made, used or sold within the United States for the purposes of this title . . . .” Congress’s logic in extending U.S. patent laws to U.S.-spaceships in outer space lends strong support for finding U.S. patent laws extend to U.S.-flagged ship on the high seas.

DAL may view that any holding on this issue is compelled by the traditional understanding that U.S. patent laws do not apply to foreign activities. *See Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437, 454–55 (2007). But DAL would be missing an important waypoint in that, given that the nationality of a U.S. flagship is “American,” it would be incorrect to say that the activities upon her deck are foreign. Even so, the Supreme Court has warned against adopting categorical holdings based on general guiding principles. In *Spector v. Norwegian Cruise Line Ltd.*, the U.S. Court of Appeals for the Fifth Circuit categorically held that Title III of the Americans with Disabilities Act of 1990 (“ADA”) does not apply to foreign vessels in U.S. ports based on the principle that a general statute does not apply to the internal operations of a foreign vessels in U.S. waters absent clear congressional intent. 545 U.S. 119, 127 (2005) (plurality opinion). Even though

Title III does not contain any provision expressly permitting its application to foreign-flag vessels, the Supreme Court reversed. *Id.* at 127–28. It reasoned that, if applied in a sweeping manner to the whole of Title III, the principle that general statutes do not apply to the internal affairs of foreign ships in domestic waters “is unlikely to reflect congressional intent” because such an all-or-nothing approach could nullify other applications of the statute. *Id.* at 132, 139. Instead, the Court explained that it is necessary to consider each disputed provisions separately to assess whether there is the potential for interference with the internal affairs of the foreign-flagged ship. *Id.* 132–33.

Here, DAL seeks to convert the principle that patent laws do not apply to foreign activities into the categorical rule that U.S.-patent laws can never extend to U.S.-flagged ships in international water. DAL’s argument fails to consider the possibility for extraterritorial applications or for applications involving the internal affairs of a U.S.-flagged ship. Case law shows that these possibilities are not so remote. For example, in *Brown v. Duchesne*, the Court held that U.S. patent laws did not apply to a French-flagged ship in the port of Boston. 60 U.S. (19 How.) 183, 198–99 (1856). The patented technology claimed an improvement in the construction of the gaff of sailing vessels, a gaff being an integral part of the ship. *Id.* at 188, 193. Because the gaff was part of the ship’s construction and was attached to the ship in France, the Court held that U.S. patent laws would not apply to any potential infringement occurring in U.S. ports. *Id.* at 198–99. The holding in *Duchesne* suggests that whether an infringement dispute involves the internal affairs of a ship may depend on the patented technology itself. DAL’s proposed categorical rule fails to account for such possibilities, possibilities that are as infinite as the sea.

Lastly, it is worth recognizing the Supreme Court’s increasing interest in international activity that bears on

U.S. patent laws, indicating that we should cautiously consider cases presenting extraterritoriality questions. In *Impression Products Inc. v. Lexmark International, Inc.*, the Court held that a patent owner's exclusive rights in its invention or improvement can be exhausted through its international sales and recognized that U.S. patent laws do not traditionally apply abroad. 137 S. Ct. 1523, 1536 (2017). The Court concluded that a patent owner cannot assert infringement liability against a party importing its foreign-sold patented inventions into the United States. *Id.* The Court recently heard argument in *WesternGeco LLC v. ION Geophysical Corp.*, No. 16-1011 (S. Ct.), which presents the question of whether a patent owner, after proving a domestic act of infringement, can obtain damages for lost profits for failure to win service contracts to be performed on the high seas. While the location of damages is at issue in *WesternGeco*, and location of liability is at issue in the instant case, both grapple with the question of how to ensure that a U.S. patent owner can recover from the harm of infringement for patented technology that involves activity in international waters.

What is particularly troubling in this case is that if U.S. law does not apply to infringing activity on a U.S.-flagged ship in international water, then it is possible no law applies. DAL seeks to promote the exploitation of this loophole by instructing potential infringers to take to the high seas, modern day privateers armed with letters of marque from the U.S. government. That view is distinctly harmful where, as here, the patented invention operates exclusively on the high seas. With continuing advances in deep sea technology and the increasing accessibility of international waters, and the far reaches of outer space, we should consider the scope and protections of U.S. patent law without resorting to categorical rules.