## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MINNESOTA

M-I Drilling Fluids UK Ltd. and M-I LLC,

Plaintiffs,

v.

Dynamic Air Ltda.,

Defendant.

Civil No. 13-2385 (JNE/HB)

SECOND AMENDED COMPLAINT

JURY TRIAL DEMANDED

## SECOND AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiffs M-I Drilling Fluids UK Ltd. and M-I LLC for its Second Amended Complaint, allege as follows:

#### **INTRODUCTION**

1. This is an action brought by M-I Drilling Fluids UK Ltd. ("M-I Drilling") and M-I LLC ("M-I LLC") (collectively "Plaintiffs") against Dynamic Air Ltda. ("DAL") for DAL's infringement of patents owned by M-I Drilling and exclusively licensed to M-I LLC. In particular, DAL has infringed U.S. Patent Nos. 6,709,217 (the "217 Patent"), 7,186,062 (the "062 Patent"), and 7,544,018 (the "018 Patent") (collectively, the "Asserted Patents"). This action arises under the patent laws of the United States, 35 U.S.C. § 100, et seq.

#### **PARTIES**

- 2. M-I Drilling is a foreign private limited company existing under the laws of the United Kingdom, with its principal place of business at Porca Quay, Aberdeen, Aberdeenshire, AB11 5DQ, United Kingdom.
- 3. M-I LLC is a limited liability company existing and organized under the laws of the State of Delaware. It has a principal place of business at 5950 North Course Drive, Houston, Texas 77072.
- 4. Defendant DAL is a foreign corporation existing under the laws of Brazil, with its principal place of business at Av. Mathias Lopes 5.821, 12960-000 Nazare Paulista 12960-000 Sp, Brazil. DAL is a subsidiary of Dynamic Air Inc. ("DAI"), who is headquartered in this District. Upon information and belief, DAL sometimes does business under the trade name "Dynamic Air Oil & Gas."

## **JURISDICTION AND VENUE**

- 5. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a) as the methods, systems, and components accused of infringement are installed and/or used in whole or in part on U.S. flagged ships which are subject to U.S. Patent laws.
- 6. This Court has personal jurisdiction over DAL pursuant to Federal Rule of Civil Procedure 4(k)(2) because this case arises under federal law, DAL is not subject to jurisdiction in any state's courts of general jurisdiction, and DAL has regularly engaged in business in the United States and purposefully availed itself of the privilege of conducting business in the United States by installing and operating conveying systems

for drill cuttings on the U.S.-flagged ships HOS Resolution and HOS Pinnacle, which are part of U.S. territory. These activities infringe the Asserted Patents.

- 7. The Federal Circuit confirmed this Court's personal jurisdiction over DAL in its opinion and order in *M-I Drilling et. al. v. Dynamic Air Ltda.*, No. 16-1772 (May 14, 2018). There, the Federal Circuit held this Court has personal jurisdiction over DAL under FRCP 4(k)(2) and that exercising specific personal jurisdiction comports with due process.
- 8. Venue is proper in this District for DAL under 35 U.S.C. § 1391(c)(2) and (3) and 35 U.S.C. § 1400(b) because DAL is subject to this Court's personal jurisdiction and because DAL is not resident in the United States.

#### **BACKGROUND**

# I. M-I DRILLING, CLEANCUT® TECHNOLOGY, AND THE ASSERTED PATENTS

- 9. Plaintiffs are leading suppliers of drilling fluid systems and equipment engineered to improve drilling performance by anticipating fluids-related problems, fluid systems and specialty tools designed to optimize wellbore productivity, production technology solutions to maximize production rates, and environmental solutions that safely manage waste volumes generated in both drilling and production operations.
- 10. When oil wells are drilled, the subterranean formation cuttings from the drilling operation are brought to the drilling rig on the surface. A drilling rig could be, for example, an off shore drilling platform or a drillship. When brought to the surface, drill cuttings are in slurry with drilling fluid, and after some degree of separation from the

drilling fluid, form a paste. Drill cuttings must be disposed of in an environmentally-safe way and are typically transported off of the rig for processing elsewhere. Often times, ships will receive drill cuttings from the rig and transport them to shore for processing and/or disposal.

- 11. One of the products and services that Plaintiffs offer their customers is the CLEANCUT® pneumatic drill cuttings collection and containment system. CLEANCUT® has been used to effectively complete hundreds of well sections with nearly 2 million barrels of cuttings safely collected and transported.
- 12. The Asserted Patents are directed to methods and systems used for collecting, conveying, transporting, and/or storing non-free flowing material, such as drill cuttings, in an environmentally-safe way. The Asserted Patents provide a novel way to pneumatically convey non-free flowing materials, such as drill cuttings, using compressed gas and one or more containers or vessels. The claims of the Asserted Patents cover, *inter alia*, stand-alone pneumatic conveyance systems as well as systems specifically located or used aboard a receiving ship as well as systems installed on both a rig and receiving ship and used to transfer cuttings from one to the other and methods of using those systems.
- 13. M-I Drilling is the owner by assignment of all of the Asserted Patents. M-I LLC is an exclusive licensee of the Asserted Patents.

<sup>&</sup>lt;sup>1</sup> It should be noted that the "vessel" claimed and discussed by the Asserted Patents is not the ship or the rig – it is a containment structure for the cuttings.

- 14. The 217 Patent, entitled *Method of Pneumatically Conveying Non-Free Flowing Paste*, was duly and lawfully issued on March 23, 2004. M-I Drilling is the current owner of all rights, title, and interest in the 217 Patent. M-I LLC is an exclusive licensee to the 217 Patent. A true and correct copy of the 217 Patent is attached hereto as Exhibit A.
- 15. The 062 Patent, entitled *Method and Apparatus for Pneumatic Conveying of Drill Cuttings*, was duly and lawfully issued on March 6, 2007. M-I Drilling is the current owner of all rights, title, and interest in the 062 Patent. M-I LLC is an exclusive licensee to the 062 Patent. A true and correct copy of the 062 Patent is attached hereto as Exhibit B.
- 16. The 018 Patent, entitled *Apparatus for Pneumatic Conveying of Drill Cuttings*, was duly and lawfully issued on June 9, 2009. M-I Drilling is the current owner of all rights, title, and interest in the 018 Patent. M-I LLC is an exclusive licensee to the 018 Patent. A true and correct copy of the 018 Patent is attached hereto as Exhibit C.
- 17. The Asserted Patents were the subject of several *Inter Partes* Reviews ("IPRs") before the Patent Trial and Appeal Board of the U.S. Patent and Trademark Office. These IPRs confirmed the validity of the claims asserted in this lawsuit, claim 11 of the 217 Patent, claim 11 of the 018 Patent, and claim 3 of the 018 Patent.

#### II. DYNAMIC AIR AND ITS INFRINGING CONVEYING SYSTEM

18. DAL manufactures, sells, and operates pneumatic conveyance methods, systems, and apparatuses that use pneumatic means to transfer materials, such as drill

cuttings. This includes methods, systems, and apparatuses to transfer drill cuttings off an offshore drilling rig for storage and disposal. At least some of the vessels in this system and apparatus are adapted to fit within an ISO container frame.

- 19. Sometime between October 2011 and January 2012, DAL submitted a bid in response to a Request for Proposal ("RFP") from Petróleo Brasileiro S.A. ("Petrobras") for a pneumatic conveyance system that could be used to remove drill cuttings from a drilling rig. M-I Drilling's sister company and customer, M-I Swaco do Brasil Comercio, Servicos E Mineracao Ltda. ("M-I Brazil"), submitted a bid in response to the RFP as well.
- 20. DAL was the winner of the bidding process, and, upon information and belief manufactured, sold, and subsequently operated such a system on the HOS Resolution, a U.S.-flagged ship, that pneumatically conveyed drill cuttings from off-shore rigs, including P-59, located off the coast of Vitoria, Brazil, into vessels on the HOS Resolution in a manner that infringed the Asserted Patents. DAL then stored those cuttings in the vessels and transported them to a disposal or processing site and pneumatically conveyed the cuttings out of the vessels in a manner that also infringed the Asserted Patents.
- 21. On or around February 2013, DAL employees used such a system to pneumatically convey drill cuttings onto and off of the HOS Resolution and have continued this infringing activity until on or about September 2015 when the equipment was removed from the HOS Resolution. DAL indicated at the time, however, that the

equipment could be reinstalled on a ship at any time. It is unknown if the Accused System was ever reinstalled upon another U.S.-flagged ship.

22. On or around August 2013, DAL installed a similar pneumatic conveyance system aboard the HOS Pinnacle, a U.S.-flagged ship, for pneumatically conveying drill cuttings from offshore rigs into vessels on the HOS Pinnacle in a manner that infringes the Asserted Patents. DAL then stores those cuttings in the vessels and transports them to a disposal or processing site and pneumatically conveys the cuttings out of the vessels in a manner that also infringes the Asserted Patents. DAL continued this infringing activity until on or about August 2015 when the equipment was removed from the HOS Pinnacle. DAL indicated at the time, however, that the equipment could be reinstalled on a ship at any time. It is unknown if the Accused System was ever reinstalled upon another U.S.-flagged ship.

#### **GENERAL ALLEGATIONS**

- 23. M-I Drilling owns by assignment the entire right, title, and interest in and to the Asserted Patents. M-I LLC is an exclusive licensee to the Asserted Patents.
- 24. DAL has infringed and may continue to infringe each of the Asserted Patents by engaging in acts constituting infringement under 35 U.S.C. § 271, including but not necessarily limited to one or more of making, using, selling, and offering to sell in the United States, and importing into the United States, certain material conveying systems, including, but not limited to conveying systems for drill cuttings currently or previously installed on the U.S.-flagged ships HOS Resolution and HOS Pinnacle, which are part of United States territory under U.S. Patent Law.

## **COUNT I**

## **INFRINGEMENT OF U.S. PATENT NO. 6,709,217**

- 25. Plaintiffs incorporate by reference the allegations set forth in the above paragraphs as though fully set forth herein.
- 26. DAL has directly infringed and upon information and belief may still be infringing the 217 Patent in the United States under 35 U.S.C. § 271(a) by making, using, offering for sale, selling, and importing, without authority, products and services including pneumatic conveyance systems, such as the pneumatic conveyance systems currently or previously aboard the HOS Resolution and HOS Pinnacle.
- 27. Specifically, DAL has directly infringed claim 11 of the 217 patent by performing, or directing and controlling others to perform, each claimed method step of claim 11. This infringement occurs, for example, when pastes, such as certain drill cuttings, are loaded into vessel(s) aboard the U.S. flagged ships, and then subsequently conveyed from one or more said vessel(s) aboard the ship using the Accused Systems. To the extent a third party, such as Hornbeck Offshore Services ("Hornbeck"), Petrobras, or others, has performed one or more of the steps above, those third parties have, upon information and belief, done so at the direction or control of DAL.
- 28. DAL's infringement of the 217 Patent has caused and continues to cause damage to Plaintiffs in an amount to be determined at trial. DAL continued to infringe the 217 patent even after DAL had knowledge of the patent (as explained below) and so such infringement is willful and Plaintiffs are entitled to enhanced damages.

- 29. DAL's acts have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to Plaintiffs for which there is no adequate remedy at law. Unless enjoined by this Court, DAL will continue to infringe the 217 Patent.
- 30. DAL's infringement of the 217 Patent is exceptional and entitles Plaintiffs to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

#### **COUNT II**

#### **INFRINGEMENT OF U.S. PATENT NO. 7,186,062**

- 31. Plaintiffs incorporate by reference the allegations set forth in the above paragraphs as though fully set forth herein.
- 32. DAL has directly infringed and upon information and belief may still be infringing the 062 Patent in the United States under 35 U.S.C. § 271(a) by making, using, offering for sale, selling, and importing, without authority, products and services including pneumatic conveyance systems, such as the pneumatic conveyance systems currently or previously aboard the HOS Resolution and HOS Pinnacle.
- 33. Specifically, DAL has directly infringed claim 11 of the 062 patent by performing, or directing and controlling others to perform, each claimed method step of claim 11. This infringement occurs, for example, when drill cuttings are loaded into vessel(s) aboard the U.S. flagged ship, and then subsequently conveyed from one or more said vessel(s) aboard the ship using the Accused Systems. To the extent a third party, such as Hornbeck, Petrobras, or others, has performed one or more of the steps above,

those third parties have done so, upon information and belief, at the direction or control of DAL.

- 34. DAL's infringement of the 062 Patent has caused and continues to cause damage to Plaintiffs in an amount to be determined at trial. DAL continued to infringe the 062 patent even after DAL had knowledge of the patent (as explained below) and so such infringement is willful and Plaintiffs are entitled to enhanced damages.
- 35. DAL's acts have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to Plaintiffs for which there is no adequate remedy at law. Unless enjoined by this Court, DAL will continue to infringe the 062 Patent.
- 36. DAL's infringement of the 062 Patent is exceptional and entitles Plaintiffs to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

#### **COUNT III**

## **INFRINGEMENT OF U.S. PATENT NO. 7,544,018**

- 37. Plaintiffs incorporate by reference the allegations set forth in the above paragraphs as though fully set forth herein.
- 38. DAL has directly infringed and upon information and belief may still be infringing the 018 Patent in the United States under 35 U.S.C. § 271(a) by making, using, offering for sale, selling, and importing, without authority, products and services including pneumatic conveyance systems, such as the pneumatic conveyance systems currently or previously aboard the HOS Resolution and HOS Pinnacle and the respective drilling rigs.

- 39. Specifically, DAL has directly infringed claim 3 of the 018 patent by, for example, making, selling, and/or using the Accused Systems. This infringement occurs, for example, when drill cuttings are conveyed from the storage vessels on the drilling rig into pressure vessel(s) aboard the U.S. flagged ship, and then subsequently conveyed from one or more vessel(s) aboard the ship using the Accused Systems. To the extent a third party, such as Hornbeck, Petrobras, or others, has used the Accused Systems, those third parties have been induced, upon information and belief, to do so by DAL as explained below.
- 40. DAL has induced and upon information and belief may still be inducing the infringement of the 018 Patent by others in the United States under 35 U.S.C. § 271(b). The direct infringement occurs, upon information and belief, by the use of the Accused Systems by third parties, such as Hornbeck, Petrobras, or others, of the pneumatic conveyance systems. Upon information and belief, DAL performed the acts that constitute the induced infringement with knowledge of the 018 Patent and with the knowledge or willful blindness that the induced acts would constitute infringement.
- 41. DAL has had knowledge of the 018 Patent (and the other Asserted Patents) at least as of August 29, 2013 when M-I Drilling sent a notice letter to DAL indicating that DAL induces infringement of the claims of the 018 patent. DAL has also had knowledge of the 018 Patent (and the other Asserted Patents) as of October 4, 2013 by receiving Portuguese and English versions of the original complaint in this litigation. DAL has also had notice when it was officially served with the first Complaint in this

litigation on or around May 18, 2015 per the protocol of the Inter-American Service Convention.

- 42. As shown in the above paragraphs, DAL has had knowledge of the 018 patent and the other Asserted Patents at least as of August 29, 2013.
- 43. Despite this knowledge, DAL has, upon information and belief, specifically instructed end users to operate the pneumatic conveyance systems to convey drill cuttings in an infringing way. Upon information and belief, DAL installed and set up the pneumatic conveyance systems on ships, such as the HOS Resolution and HOS Pinnacle, and various rigs and provided third parties specific instructions on how to operate the pneumatic conveyance systems in an infringing way.
- 44. DAL's infringement of the 018 Patent has caused and continues to cause damage to Plaintiffs in an amount to be determined at trial. DAL continued to infringe the 018 patent even after DAL had knowledge of the patent and so such infringement is willful and Plaintiffs are entitled to enhanced damages.
- 45. DAL's acts have caused, and unless restrained and enjoined, will continue to cause, irreparable injury and damage to Plaintiffs for which there is no adequate remedy at law. Unless enjoined by this Court, DAL will continue to infringe the 018 Patent.
- 46. DAL's infringement of the 018 Patent is exceptional and entitles Plaintiffs to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

## **DEMAND FOR JURY TRIAL**

47. Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiffs demand a trial by jury of all issues so triable.

#### PRAYER FOR RELIEF

WHEREFORE, Plaintiffs pray for judgment and seek relief against DAL as follows:

- (a) That the Asserted Patents have been and continue to be directly and/or indirectly infringed by DAL, and that such infringement has been willful;
  - (b) That the Asserted Patents are not invalid and are not unenforceable;
- (c) For all damages sustained as a result of each of DAL's infringement of the Asserted Patents as herein alleged, including an award of enhanced damages pursuant to 35 U.S.C. § 284;
- (d) For pre-judgment interest and post-judgment interest at the maximum rate allowed by law;
- (e) For a permanent injunction enjoining DAL, its officers, agents, servants, employees and all other persons acting in concert or participation with it from further infringement, and inducement of infringement of the Asserted Patents;
- (f) For an award of attorneys' fees pursuant to 35 U.S.C. § 285 or as otherwise permitted by law;
  - (g) For all costs of suit; and
  - (h) For such other and further relief as the Court may deem just and proper.

Dated: January 29, 2019 By: s/ Eric H. Chadwick

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