

1 Vincent Cox (SBN 070511)  
BALLARD SPAHR LLP  
2 2029 Century Park East, Suite 800  
Los Angeles, CA 90067-2909  
3 Telephone: 424.204.4400  
Facsimile: 424.204.4350

4 Of Counsel:

5 Lynn E. Rzonca  
6 rzoncal@ballardspahr.com  
Brian S.S. Auerbach  
7 auerbachb@ballardspahr.com  
BALLARD SPAHR LLP  
8 1735 Market Street, 51st Floor  
Philadelphia, PA 19103-7599  
9 Telephone: 215.864.8109  
Facsimile: 215.864.8999

10 Attorneys for Plaintiff  
11 ARIES GASIFICATION, LLC

12 **UNITED STATES DISTRICT COURT**  
13 **EASTERN DISTRICT OF CALIFORNIA**

14  
15 ARIES GASIFICATION, LLC,

16 Plaintiff,

17  
18 v.

19 NORTH FORK COMMUNITY POWER,  
20 LLC, a California limited liability  
21 company; PHOENIX BIOMASS  
22 ENERGY, INC., a Delaware corporation;  
and EQTEC PLC, a foreign corporation,

23  
24 Defendants.  
25

Case No. []

**COMPLAINT FOR PATENT  
INFRINGEMENT**

**DEMAND FOR JURY TRIAL**

Ballard Spahr LLP  
2029 Century Park East, Suite 800  
Los Angeles, California 90067-2909

1 **COMPLAINT FOR PATENT INFRINGEMENT**

2 Plaintiff Aries Gasification LLC (“Aries” or “Plaintiff”), by and through its  
3 undersigned counsel, alleges as follows:

4  
5 **I. THE PARTIES**

6 1. Plaintiff Aries Gasification LLC is a Tennessee limited liability  
7 company having a principal office located at 4037 Rural Plains Circle, Suite 290,  
8 Franklin, Tennessee 37064.

9 2. Upon information and belief, Defendant North Fork Community  
10 Power, LLC (“NFCP”) is a California limited liability company having a principal  
11 office located at 57839 Road 225, North Fork, California, 93643.

12 3. Upon information and belief, Defendant Phoenix Biomass Energy,  
13 Inc. (“Phoenix Energy”) is a Delaware corporation having a principal office  
14 located at 57839 Road 225, North Fork, California, 93643.

15 4. Upon information and belief, Defendant EQTEC plc (“EQTEC”, and  
16 together with NFCP and Phoenix Energy, “Defendants”) is an Irish public liability  
17 company having a principal office located at Building 1000, City Gate, Mahon,  
18 Cork, Ireland, T12W7CV.

19 **II. JURISDICTION AND VENUE**

20 5. This action arises under the Patent Laws of the United States of  
21 America, 35 U.S.C. § 1 *et seq.*

22 6. This Court has subject matter jurisdiction over this action under 28  
23 U.S.C. § 1331 and 28 U.S.C. § 1338(a) because this is a civil action arising under  
24 the Patent Act.

25 7. This Court has personal jurisdiction over NFCP and Phoenix Energy  
26 at least due to both entities having principal places of business in this District and  
27 due to both entities conducting their infringing activities in this District.

Ballard Spahr LLP  
2029 Century Park East, Suite 800  
Los Angeles, California 90067-2909



1 Cairney, Gerald Cox, and William Jepson. A true and correct copy of the '973  
2 Patent is attached hereto as Exhibit 3.

3 15. On June 30, 2020, the United States Patent and Trademark Office  
4 ("USPTO") duly issued United States Patent No. 10,696,913 ("the '913 Patent"),  
5 entitled "Gasification Reactor with Pipe Distributor," in the names of inventors  
6 Renus Kelfkens, Brandon Davis, Paul Cairney, Gerald Cox, William Jepson,  
7 Douglas Bull, and Ross Patten. A true and correct copy of the '973 Patent is  
8 attached hereto as Exhibit 4.

9 16. Aries owns by assignment all right, title, and interest in and to the  
10 '219 Patent, the '769 Patent, the '973 Patent, and the '913 Patent (collectively the  
11 "Patents-in-Suit").

12 17. Each of the Patents-in-Suit relate to fluidized bed biogasifiers and  
13 methods for construction and use of the same. Via the use of the novel inventions  
14 embodied in the Patents-in-Suit, a user can convert biologic materials, which may  
15 themselves be waste or byproducts of other industrial processes, into energy  
16 sources that can be used for a variety of purposes, including being fed back into the  
17 industrial processes that created the biologic materials in the first place. In this  
18 way, industrial applications can reduce their carbon footprint and decrease reliance  
19 on present fossil fuel sources.

20 18. A biogasifier system may have several components, all of which work  
21 together to convert the biologic material into energy. A dewatering unit can  
22 remove water from any wet biomaterial, but is optional if the biomaterial to be  
23 processed is not in liquid form. A pre-dryer can be used to pre-heat biomaterial  
24 prior to its introduction into a dryer, in which the biomaterial has a significant  
25 portion of its inherent moisture removed. From there, the dried biomaterials can be  
26 stored for future consumption, or can be fed into the biogasifier unit itself for  
27 immediate conversion.

28

1           19. The biogasifier unit (sometimes referred to as the “gasification  
2 reactor”) utilizes controlled high temperatures, oxygen, and/or steam to convert the  
3 prepared biologic material into reusable energy in the form of synthetic gas  
4 (“syngas”). Note the conversion process is achieved without combusting (i.e.,  
5 burning) the biomaterials, thereby decreasing the amount of pollutants generated  
6 by the biogasification process. Several methods of gasification are possible; the  
7 Patents-in-Suit specifically contemplate improvements to what are commonly  
8 known as “fluidized bed reactors.” Fluidization is a process whereby a gas stream  
9 is passed through a bed of prepared solid biologic material with sufficient velocity  
10 to suspend the material in the gas stream, which then behaves as a fluid.  
11 Fluidization of the biomaterial typically results in a more efficient and higher  
12 product gas yield than other forms of biogasification due to the turbulent mixing  
13 and large exposed surface area of the material within the fluidized bed.

14           20. Claim 1 of the '973 Patent exemplifies the elements of Aries' novel  
15 biogasifiers:

16           A gasification reactor comprising:  
17           a discrete reactor vessel which is cylindrical in shape  
18           having a bottom with an inverted cone section;  
19           a freeboard section comprising the top half of the reactor  
20           vessel, said freeboard section having a diameter of at  
21           least 57 inches;  
22           a fluidized bed in a bed section within said reactor vessel  
23           located beneath the freeboard section, said fluidized bed  
24           having a diameter of at least 45 inches;  
25           at least one fuel feed inlet located beneath the freeboard  
26           section, said inlet configured to feed a fuel into said  
27           reactor vessel at a fuel feed rate during steady-state  
28           operation of the gasifier;

1 a gas distributor located within the inverted cone section  
2 comprising a flue gas and air inlet that feeds flue gas and  
3 air to an array of nozzles whereby the flue gas and air are  
4 directed into the fluidized bed in the bed section;  
5 and an ash grate positioned beneath the bottom of the  
6 discrete reactor vessel.

7 21. Via its novel innovations related to biogasification, as described in the  
8 Patents-in-Suit, Aries has developed and implemented sustainable methods to  
9 allow various industries the ability to convert their waste biomaterials into syngas  
10 fuel. This renewable approach lowers costs, lowers overall energy usages,  
11 mitigates emissions, and ultimately provides great environmental dividends.

12 **IV. DEFENDANTS' PATENT INFRINGEMENT**

13 22. Upon information and belief, defendant Phoenix Energy, in  
14 partnership with the North Folk Community Development Counsel, formed the  
15 NFCP entity for the purpose of building and operating a multiple-megawatt power  
16 plant in North Fork, California (the "North Fork Biomass Project").

17 23. Upon information and belief, the North Fork Biomass Project utilizes  
18 forest biomass as the biologic material fuel source, and converts the same into  
19 syngas using the systems and methods as claimed in the Patents-in-Suit.

20 24. Upon information and belief, on or around June 4, 2019 Defendant  
21 EQTEC became a 20 percent equity partner in NFCP.

22 25. Upon information belief, EQTEC announced that in addition to its  
23 financial partnership, EQTEC entered into a contract with NFCP to provide  
24 equipment to NFCP and to supply engineering and design services to NFCP such  
25 that the North Folk Biomass project can produce syngas in sufficient quality and  
26 quantity to achieve two megawatts on a continuous basis.

Ballard Spahr LLP  
2029 Century Park East, Suite 800  
Los Angeles, California 90067-2909

1           26. Upon information and belief, as of January 2, 2020 the North Fork  
2 Biomass Project achieved a financial closing sufficient to begin commission during  
3 the first quarter of 2021.

4           27. Upon information and belief, EQTEC’s website describes its  
5 gasification technology as “based on a bubbling fluidised bed reactor suitable for a  
6 wide range of waste and biomass, guaranteeing a high degree of availability and  
7 reliability in the plants.” EQTEC’s publicly available documentation related to its  
8 gasifier technology is attached hereto as Exhibit 5.

9           28. In particular, the EQTEC documentation describes a “reactor  
10 consist[ing] of a steel container, usually cylindrical, coated on the inside with a  
11 layer of refractory insulation material. It is a bubbling fluidized bed reactor; this  
12 type of reactor is widely used due to its versatility in terms of the diversity of solid  
13 fuel to gasify, because it achieves a better mixture between inert and combustible  
14 material due to its high heat transfer index and because it reaches high heating  
15 speeds, among other advantages.” (Exhibit 5, p. 4.)

16           29. The EQTEC documentation includes a picture under the captioned  
17 “Diagram of operation and image of a fluidised bed Gasifier using EQTEC  
18 Gasifier Technology” shown below:

19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Ballard Spahr LLP  
2029 Century Park East, Suite 800  
Los Angeles, California 90067-2909



Ballard Spahr LLP  
2029 Century Park East, Suite 800  
Los Angeles, California 90067-2909

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20



21           30. Upon information and belief, the EQTEC documentation describes  
22 biomass gasifiers that infringe the claims of the Patents-in-Suit, as they show at  
23 least a gasification reactor having a cylindrical reactor vessel with an inverted cone  
24 bottom; a freeboard section comprising the top half of the reactor vessel; a  
25 fluidized bed in a bed section within the reactor vessel located below the freeboard  
26 section; at least one fuel feed inlet located beneath the freeboard section; and a gas  
27 distributor located within the inverted cone section comprising a flue gas and air  
28 inlet that feeds flue gas and air to an array of nozzles whereby the flue gas and air



1 are directed into the fluidized bed in the bed section. Upon information and belief,  
2 the EQTEC documentation also describes biomass gasifiers that include one or  
3 more ash grates positioned beneath the bottom of the reactor vessel.

4 31. Upon information and belief, Phoenix Energy’s website states that  
5 “Phoenix Energy designs and builds small scale (.5 to 2 MW) gasification  
6 powerplants fueled by biomass (wood waste, agricultural waste, or other biological  
7 waste products).”

8 32. Upon information and belief, Phoenix Energy and/or EQTEC’s  
9 technology, or a combination thereof, is being used in the North Folk Biomass  
10 Project and infringes one or more claims of the Patents-in-Suit.

11 33. Upon information and belief, the infringing biogasification reactor is  
12 to be constructed at 34000 Koso Nobe Road, and as of August 22, 2019 at least  
13 some preparation for the reactor’s construction had already occurred.

14 34. On January 30, 2020, counsel for Aries informed Phoenix Energy of  
15 its infringement of the ’219 Patent and the ’769 Patent. Counsel sent a subsequent  
16 communication to Phoenix Energy on April 24, 2020 reiterating its position  
17 regarding the ’219 Patent and the ’769 Patent, and informing Phoenix Energy of  
18 the issuance of the ’973 Patent. A copy of the April 24, 2020 letter is attached  
19 hereto as Exhibit 6.

20 35. On January 30, 2020, counsel for Aries informed EQTEC of its  
21 infringement of the ’219 Patent and the ’769 Patent. Counsel sent a subsequent  
22 communication to EQTEC on April 22, 2020 reiterating its position regarding the  
23 ’219 Patent and the ’769 Patent, and informing EQTEC of the issuance of the ’973  
24 Patent. A copy of the April 22, 2020 letter is attached hereto as Exhibit 7. On June  
25 16, 2020, counsel set a final communication to both Phoenix Energy and EQTEC  
26 reiterating Aries’ position on the infringement of the ’219, ’769, and ’973 Patents,  
27 and informing Defendants of the then-imminent issuance of the ’913 Patent.

28

Ballard Spahr LLP  
2029 Century Park East, Suite 800  
Los Angeles, California 90067-2909

1           **V. COUNT I – INFRINGEMENT OF U.S. PATENT NO. 9,242,219**

2           36. Aries incorporates by reference the allegations contained in  
3 paragraphs 1 to 35 above.

4           37. Defendants NFCP, Phoenix Energy, and EQTEC have manufactured,  
5 used, offered for sale, sold and/or imported biomass gasifiers that infringe, either  
6 literally or under the doctrine of equivalents, one or more claims of the '219 Patent  
7 in violation of 35 U.S.C. § 271(a). Defendants' infringement will continue unless  
8 enjoined by this Court.

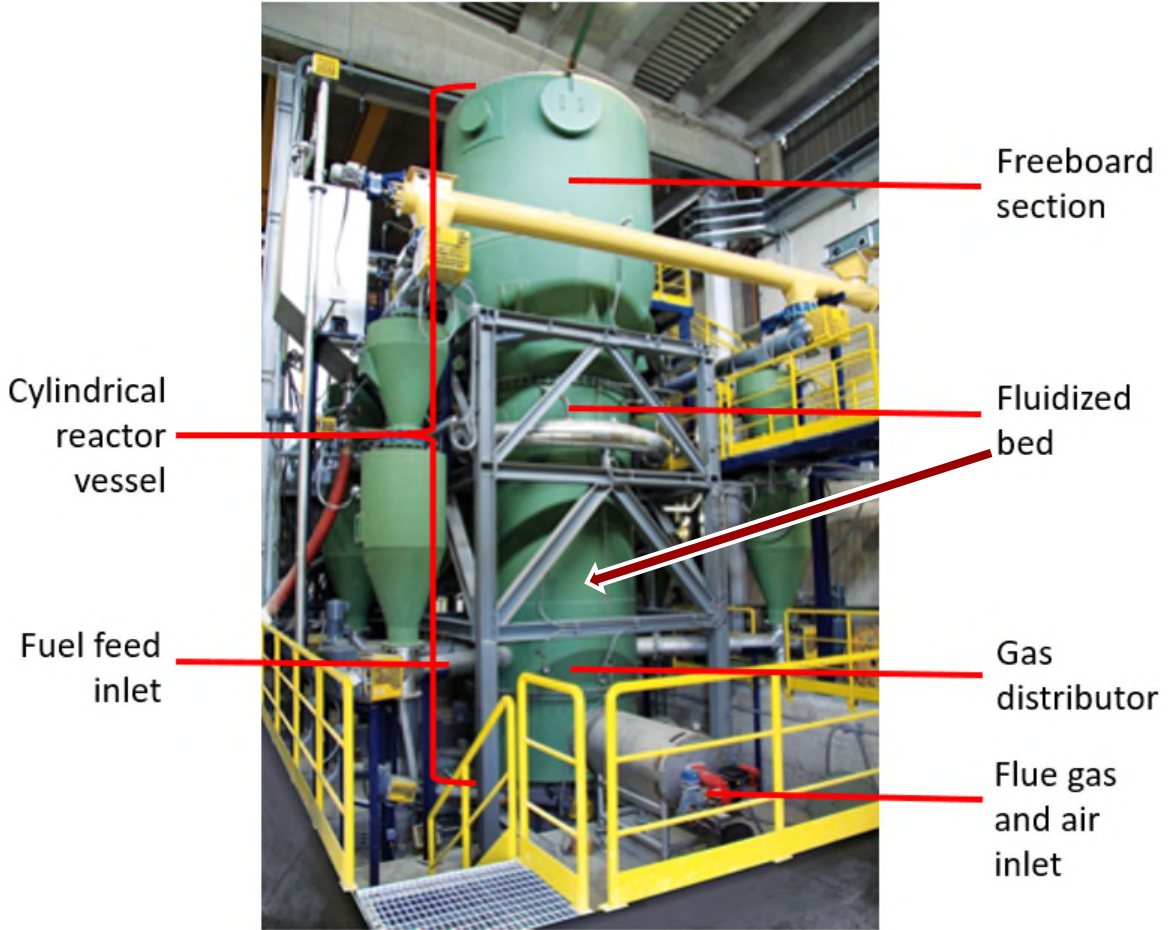
9           38. Upon information and belief, Defendants have and continue to  
10 infringe at least claim 1 of the '219 Patent via the manufacture, use, sale, offer for  
11 sale, and/or importation of a biogasifier having a reactor vessel; a freeboard section  
12 having a diameter of at least 57 inches and a height of at least 10 feet; a feeder for  
13 feeding biosolids into said reactor vessel, said feeder being configured to feed said  
14 biosolids into said reactor vessel at a biosolids fuel feed rate during steady-state  
15 operation of the biogasifier; and a fluidized bed in a base of said reactor vessel,  
16 said fluidized bed having a diameter of at least 45 inches; wherein the freeboard  
17 section has a greater diameter than the fluidized bed such that a superficial velocity  
18 range of gas inside the freeboard section during steady-state operation is between  
19 0.1 m/s (0.33ft/s) and 3 m/s (9.84ft/s), and further wherein a ratio of a height of the  
20 bed section of the reactor vessel to a depth of the fluidized bed is 1.5:

21  
22  
23  
24  
25  
26  
27  
28

Ballard Spahr LLP  
2029 Century Park East, Suite 800  
Los Angeles, California 90067-2909

Ballard Spahr LLP  
2029 Century Park East, Suite 800  
Los Angeles, California 90067-2909

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28



39. Upon information and belief, Defendants were made aware of the '219 Patent and its infringement thereof at least as early as January 30, 2020 when Aries provided notice of Defendants' infringement of the '219 Patent. Furthermore, Defendants have been aware of the '219 Patent and the infringement thereof at least since the filing of the Complaint.

40. Upon information and belief, since at least the time Defendant received notice, Defendants Phoenix Energy and EQTEC have induced and continues to induce others, including Defendant NFPC, to infringe at least one claim of the '219 Patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to NFPC, whose manufacture and use of the

1 biogasifier reactor constitutes direct infringement of at least one claim of the '219  
2 Patent.

3 41. In particular, Defendants Phoenix Energy's and EQTEC's actions that  
4 aid and abet others such as NFCP to infringe include supplying design and  
5 engineering services, and providing instruction materials and training regarding the  
6 biogasifiers. Defendants Phoenix Energy and EQTEC actively encourage the  
7 adoption, construction, and operation of the infringing biogasifiers. On information  
8 and belief, Defendants Phoenix Energy and EQTEC have engaged in such actions  
9 with specific intent to cause infringement or with willful blindness to the resulting  
10 infringement because Defendants have had actual knowledge of the '219 Patent  
11 and knowledge that their acts were inducing infringement of the '219 Patent since  
12 at least the date Defendants received notice that such activities infringed the '219  
13 Patent.

14 42. Upon information and belief, Defendants Phoenix Energy and  
15 EQTEC are liable as contributory infringers of the '219 Patent under 35 U.S.C. §  
16 271(c) by offering to sell, selling and importing into the United States biogasifier  
17 components to be especially made or adapted for use in an infringement of the  
18 '219 Patent. These components are material for use in practicing the '219 Patent  
19 and are specifically made and are not a staple article of commerce suitable for  
20 substantial non-infringing use.

21 43. Upon information and belief, since the date of their receipt of notice,  
22 Defendants' infringement of the '219 Patent has been willful.

23 44. Defendants' infringement has damaged and continues to damage and  
24 injure Aries. Aries' injury is irreparable and will continue unless and until  
25 Defendants are enjoined by this Court from further infringement.

26 **VI. COUNT II – INFRINGEMENT OF U.S. PATENT NO. 9,809,769**

27 45. Aries incorporates by reference the allegations contained in  
28 paragraphs 1 to 44 above.

1           46. Defendants NFCP, Phoenix Energy, and EQTEC have manufactured,  
2 used, offered for sale, sold and/or imported biomass gasifiers that infringe, either  
3 literally or under the doctrine of equivalents, one or more claims of the '769 Patent  
4 in violation of 35 U.S.C. § 271(a). Defendants' infringement will continue unless  
5 enjoined by this Court.

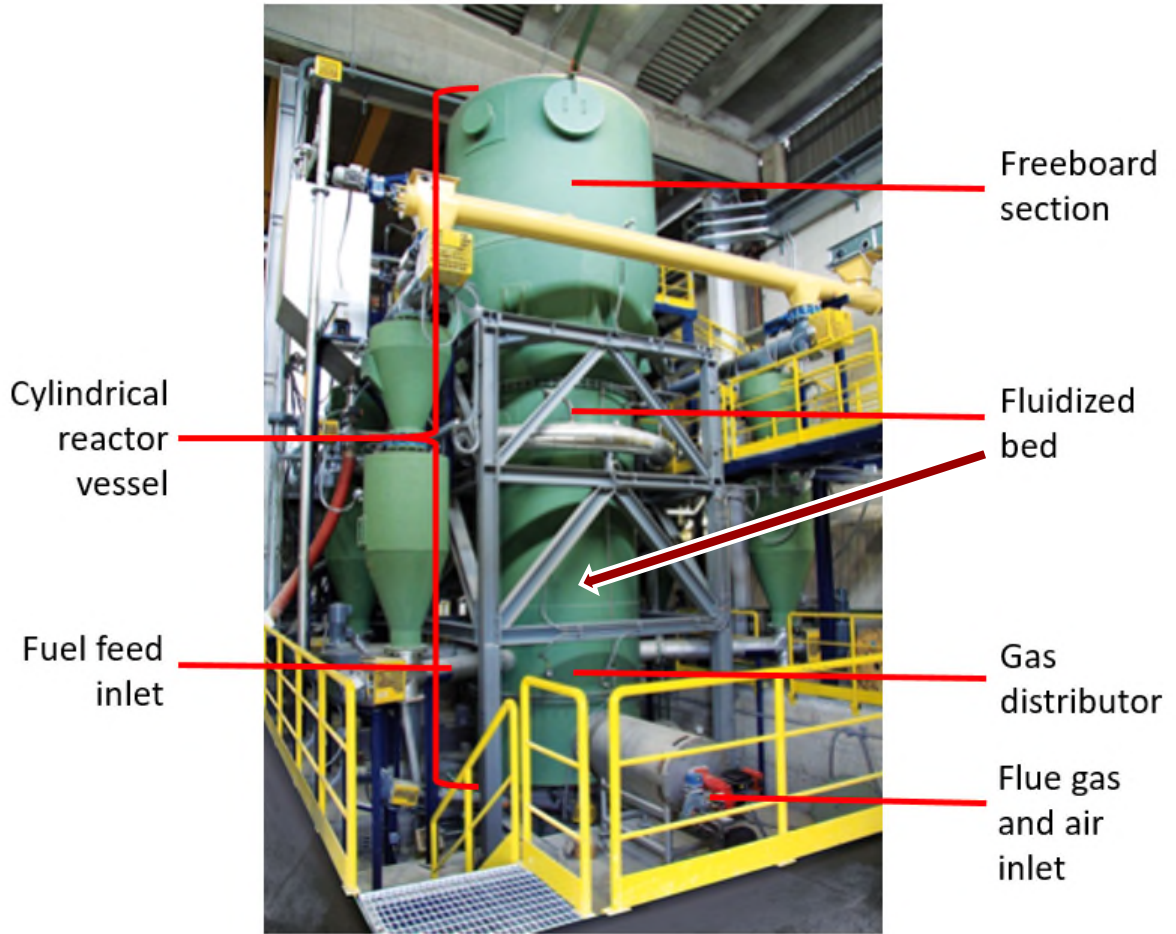
6           47. Upon information and belief, Defendants have and continue to  
7 infringe at least claim 1 of the '769 Patent via the manufacture, use, sale, offer for  
8 sale, and/or importation of a biogasifier that, when operating, practices a method  
9 for gasifying biosolids comprising receiving biosolids in a fluidized bed  
10 biogasifier, the biogasifier having: a reactor vessel; a freeboard section having a  
11 diameter of at least 57 inches and a height of at least 10 feet; a feeder for feeding  
12 biosolids into said reactor vessel, said feeder being configured to feed said  
13 biosolids into said reactor vessel at a biosolids fuel feed rate during steady-state  
14 operation of the biogasifier; and a fluidized bed in a bed section of said reactor  
15 vessel, said fluidized bed having a diameter of at least 45 inches; wherein the  
16 freeboard section has a greater diameter than the fluidized bed, wherein the ratio of  
17 the freeboard section diameter to the fluidized bed diameter is at least 57:45; and  
18 further wherein a ratio of a height of the bed section of the reactor vessel to a depth  
19 of the fluidized bed is 1.5; introducing gas to said fluidized bed reactor; and  
20 heating and reacting said biosolids inside said biogasifier, whereby biosolids are  
21 gasified:

22  
23  
24  
25  
26  
27  
28



Ballard Spahr LLP  
2029 Century Park East, Suite 800  
Los Angeles, California 90067-2909

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28



48. Upon information and belief, Defendants were made aware of the '769 Patent and its infringement thereof at least as early as January 30, 2020 when Aries provided notice of Defendants' infringement of the '769 Patent. Furthermore, Defendants have been aware of the '769 Patent and the infringement thereof at least since the filing of the Complaint.

49. Upon information and belief, since at least the time Defendant received notice, Defendants Phoenix Energy and EQTEC have induced and continues to induce others, including Defendant NFPC, to infringe at least one claim of the '769 Patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to NFPC, whose manufacture and use of the



1 biogasifier reactor constitutes direct infringement of at least one claim of the '769  
2 Patent.

3 50. In particular, Defendants Phoenix Energy's and EQTEC's actions that  
4 aid and abet others such as NFCP to infringe include supplying design and  
5 engineering services, and providing instruction materials and training regarding the  
6 biogasifiers. Defendants Phoenix Energy and EQTEC actively encourage the  
7 adoption, construction, and operation of the infringing biogasifiers. On information  
8 and belief, Defendants Phoenix Energy and EQTEC have engaged in such actions  
9 with specific intent to cause infringement or with willful blindness to the resulting  
10 infringement because Defendants have had actual knowledge of the '769 Patent  
11 and knowledge that their acts were inducing infringement of the '769 Patent since  
12 at least the date Defendants received notice that such activities infringed the '769  
13 Patent.

14 51. Upon information and belief, Defendants Phoenix Energy and  
15 EQTEC are liable as contributory infringers of the '769 Patent under 35 U.S.C. §  
16 271(c) by offering to sell, selling and importing into the United States biogasifier  
17 components to be especially made or adapted for use in an infringement of the  
18 '769 Patent. These components are material for use in practicing the '769 Patent  
19 and are specifically made and are not a staple article of commerce suitable for  
20 substantial non-infringing use.

21 52. Upon information and belief, since the date of their receipt of notice,  
22 Defendants' infringement of the '769 Patent has been willful.

23 53. Defendants' infringement has damaged and continues to damage and  
24 injure Aries. Aries' injury is irreparable and will continue unless and until  
25 Defendants are enjoined by this Court from further infringement.

26 **VII. COUNT III – INFRINGEMENT OF U.S. PATENT NO. 10,611,973**

27 54. Aries incorporates by reference the allegations contained in  
28 paragraphs 1 to 53 above.

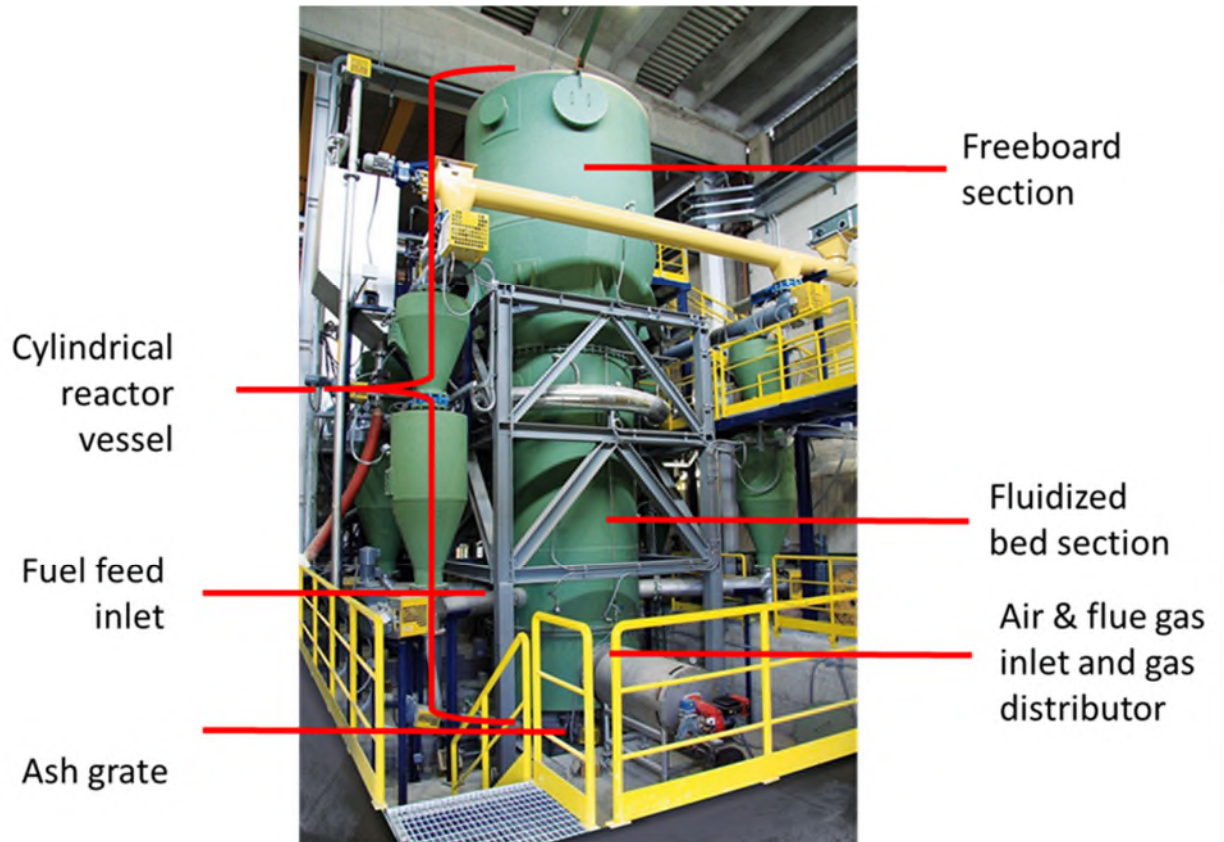
1           55. Defendants NFCP, Phoenix Energy, and EQTEC have manufactured,  
2 used, offered for sale, sold and/or imported biomass gasifiers that infringe, either  
3 literally or under the doctrine of equivalents, one or more claims of the '973 Patent  
4 in violation of 35 U.S.C. § 271(a). Defendants' infringement will continue unless  
5 enjoined by this Court.

6           56. Upon information and belief, Defendants have and continue to  
7 infringe at least claim 1 of the '973 Patent via the manufacture, use, sale, offer for  
8 sale, and/or importation of a biogasification reactor having a discrete reactor vessel  
9 which is cylindrical in shape having a bottom with an inverted cone section; a  
10 freeboard section comprising the top half of the reactor vessel, said freeboard  
11 section having a diameter of at least 57 inches; a fluidized bed in a bed section  
12 within said reactor vessel located beneath the freeboard section, said fluidized bed  
13 having a diameter of at least 45 inches; at least one fuel feed inlet located beneath  
14 the freeboard section, said inlet configured to feed a fuel into said reactor vessel at  
15 a fuel feed rate during steady-state operation of the gasifier; a gas distributor  
16 located within the inverted cone section comprising a flue gas and air inlet that  
17 feeds flue gas and air to an array of nozzles whereby the flue gas and air are  
18 directed into the fluidized bed in the bed section; and an ash grate positioned  
19 beneath the bottom of the discrete reactor vessel:

20  
21  
22  
23  
24  
25  
26  
27  
28

Ballard Spahr LLP  
2029 Century Park East, Suite 800  
Los Angeles, California 90067-2909

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28



57. Upon information and belief, Defendants were made aware of the '973 Patent and its infringement thereof at least as early as January 30, 2020 when Aries provided notice of Defendants' infringement of the '973 Patent. Furthermore, Defendants have been aware of the '973 Patent and the infringement thereof at least since the filing of the Complaint.

58. Upon information and belief, since at least the time Defendant received notice, Defendants Phoenix Energy and EQTEC have induced and continues to induce others, including Defendant NFPC, to infringe at least one claim of the '973 Patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to NFPC, whose manufacture and use of the

1 biogasifier reactor constitutes direct infringement of at least one claim of the '973  
2 Patent.

3 59. In particular, Defendants Phoenix Energy's and EQTEC's actions that  
4 aid and abet others such as NFCP to infringe include supplying design and  
5 engineering services, and providing instruction materials and training regarding the  
6 biogasifiers. Defendants Phoenix Energy and EQTEC actively encourage the  
7 adoption, construction, and operation of the infringing biogasifiers. On information  
8 and belief, Defendants Phoenix Energy and EQTEC have engaged in such actions  
9 with specific intent to cause infringement or with willful blindness to the resulting  
10 infringement because Defendants have had actual knowledge of the '973 Patent  
11 and knowledge that their acts were inducing infringement of the '973 Patent since  
12 at least the date Defendants received notice that such activities infringed the '973  
13 Patent.

14 60. Upon information and belief, Defendants Phoenix Energy and  
15 EQTEC are liable as contributory infringers of the '973 Patent under 35 U.S.C. §  
16 271(c) by offering to sell, selling and importing into the United States biogasifier  
17 components to be especially made or adapted for use in an infringement of the  
18 '973 Patent. These components are material for use in practicing the '973 Patent  
19 and are specifically made and are not a staple article of commerce suitable for  
20 substantial non-infringing use.

21 61. Upon information and belief, since the date of their receipt of notice,  
22 Defendants' infringement of the '973 Patent has been willful.

23 62. Defendants' infringement has damaged and continues to damage and  
24 injure Aries. Aries' injury is irreparable and will continue unless and until  
25 Defendants are enjoined by this Court from further infringement.

26 **VIII. COUNT IV – INFRINGEMENT OF U.S. PATENT NO. 10,696,913**

27 63. Aries incorporates by reference the allegations contained in  
28 paragraphs 1 to 62 above.

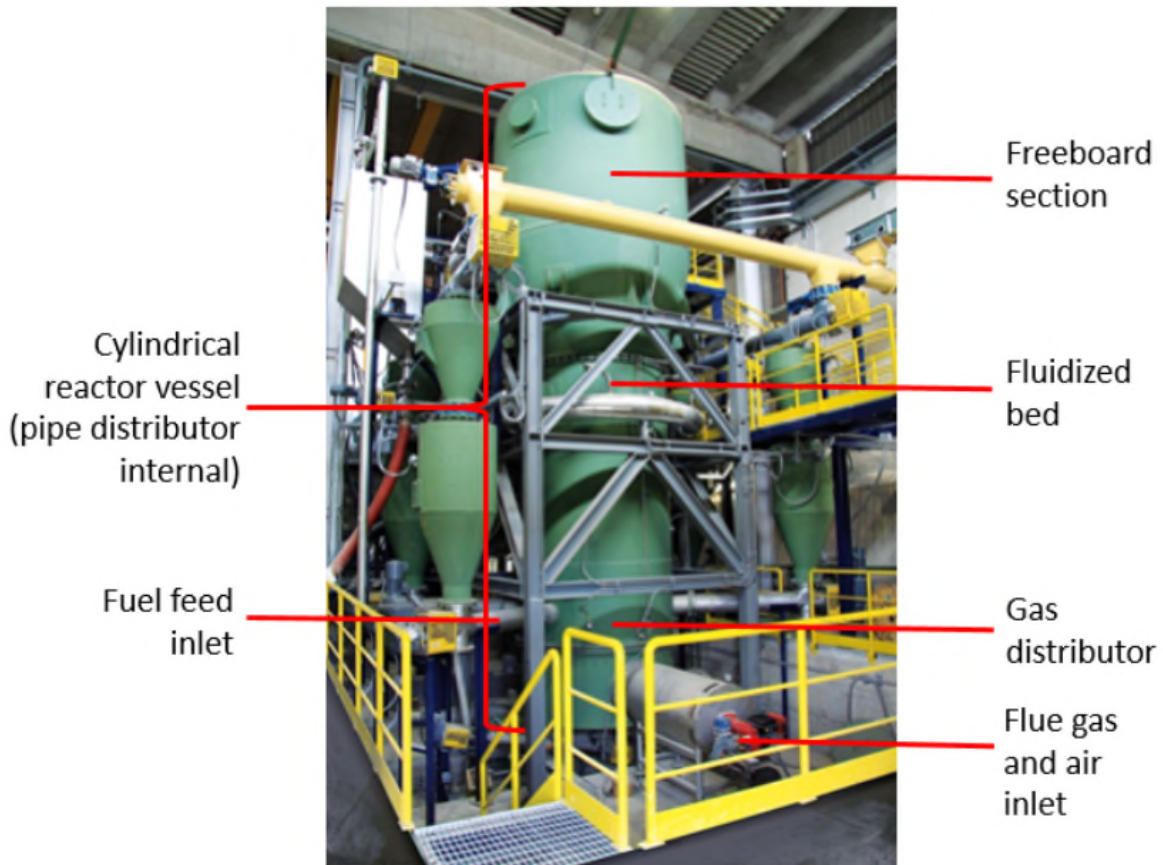
1           64. Defendants NFCP, Phoenix Energy, and EQTEC have manufactured,  
2 used, offered for sale, sold and/or imported biomass gasifiers that infringe, either  
3 literally or under the doctrine of equivalents, one or more claims of the '913 Patent  
4 in violation of 35 U.S.C. § 271(a). Defendants' infringement will continue unless  
5 enjoined by this Court.

6           65. Upon information and belief, Defendants have and continue to  
7 infringe at least claim 1 of the '913 Patent via the manufacture, use, sale, offer for  
8 sale, and/or importation of a biogasification reactor having a reactor vessel which  
9 is cylindrical in shape having a bottom with an inverted cone section; a freeboard  
10 section comprising the top half of the reactor vessel, said freeboard section having  
11 a diameter sized to contain the gas produced from the conversion of more than 40  
12 tons of fuel per day; a fluidized bed in a bed section within said reactor vessel  
13 located beneath the freeboard section, said fluidized bed having a diameter sized to  
14 process and convert more than 40 tons of fuel into gas per day; at least two fuel  
15 feed inlets located beneath the freeboard section, said fuel inlets configured to feed  
16 a fuel into said reactor vessel at a fuel feed rate of more than 40 tons of fuel per  
17 day during steady-state operation of the gasifier; and a gas distributor that is a pipe  
18 distributor comprising: a main air inlet, a center trunk line having lateral air  
19 branches; and an array of nozzles located on each of the lateral air branches;  
20 wherein the pipe distributor is located within the inverted cone section of the  
21 reactor vessel and the cone section of the reactor vessel comprises: at least one gas  
22 inlet that feeds flue gas and air to the pipe distributor main air inlet and array of  
23 nozzles whereby the gas is directed into the fluidized bed section of the reactor  
24 vessel:

Ballard Spahr LLP  
2029 Century Park East, Suite 800  
Los Angeles, California 90067-2909



Ballard Spahr LLP  
2029 Century Park East, Suite 800  
Los Angeles, California 90067-2909



66. Upon information and belief, Defendants were made aware of the '913 Patent and its infringement thereof at least as early as June 16, 2020 when Aries provided notice of Defendants' infringement of the '913 Patent. Furthermore, Defendants have been aware of the '913 Patent and the infringement thereof at least since the filing of the Complaint.

67. Upon information and belief, since at least the time Defendant received notice, Defendants Phoenix Energy and EQTEC have induced and continues to induce others, including Defendant NFCP, to infringe at least one claim of the '913 Patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to NFCP, whose manufacture and use of the



1 biogasifier reactor constitutes direct infringement of at least one claim of the '913  
2 Patent.

3 68. In particular, Defendants Phoenix Energy's and EQTEC's actions that  
4 aid and abet others such as NFCP to infringe include supplying design and  
5 engineering services, and providing instruction materials and training regarding the  
6 biogasifiers. Defendants Phoenix Energy and EQTEC actively encourage the  
7 adoption, construction, and operation of the infringing biogasifiers. On information  
8 and belief, Defendants Phoenix Energy and EQTEC have engaged in such actions  
9 with specific intent to cause infringement or with willful blindness to the resulting  
10 infringement because Defendants have had actual knowledge of the '913 Patent  
11 and knowledge that their acts were inducing infringement of the '913 Patent since  
12 at least the date Defendants received notice that such activities infringed the '913  
13 Patent.

14 69. Upon information and belief, Defendants Phoenix Energy and  
15 EQTEC are liable as contributory infringers of the '913 Patent under 35 U.S.C. §  
16 271(c) by offering to sell, selling and importing into the United States biogasifier  
17 components to be especially made or adapted for use in an infringement of the  
18 '913 Patent. These components are material for use in practicing the '913 Patent  
19 and are specifically made and are not a staple article of commerce suitable for  
20 substantial non-infringing use.

21 70. Upon information and belief, since the date of their receipt of notice,  
22 Defendants' infringement of the '913 Patent has been willful.

23 71. Defendants' infringement has damaged and continues to damage and  
24 injure Aries. Aries' injury is irreparable and will continue unless and until  
25 Defendants are enjoined by this Court from further infringement.

26  
27  
28

**PRAYER FOR RELIEF**

**WHEREFORE**, Aries requests that the Court enter judgment for Aries and against Defendants as follows:

A. That U.S. Patent Nos. 9,242,219; 9,809,769; 10,611,973; and 10,696,913 be judged valid, enforceable, and infringed by Defendants;

B. That the Court preliminarily and permanently enjoin Defendants, their officers, partners, agents, servants, employees, parents, subsidiaries, divisions, affiliate corporations, joint ventures, other related business entities and all other persons acting in concert, participation, or in privity with them, and their successors and assigns, from any commercial manufacture, use, offer to sell, or sale within the United States, or importation into the United States of the Accused Instrumentalities and any product that infringes the '219, '769, '973, and/or '913 Patents prior to their expiration;

C. That Plaintiff be awarded judgment against Defendant for damages together with interests and costs fixed by the Court including an accounting of all infringements and/or damages not presented at trial;

D. That the Court declare this an exceptional case and award Plaintiff its attorneys' fees, as provided by 35 U.S.C. § 285;

E. That Plaintiff be awarded such other and further relief as this Court may deem just and proper.

Dated: July 9, 2020

**BALLARD SPAHR LLP**

By: /s/ Vincent Cox

Vincent Cox (SBN 070511)  
2029 Century Park East, Suite 800  
Los Angeles, CA 90067-2909  
Telephone: 424.204.4362  
Facsimile: 424.204.4350  
Email: coxv@ballardspahr.com

Lynn E. Rzonca (*pro hac vice* to be filed)

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Brian S.S. Auerbach (*pro hac vice* to  
be filed)  
BALLARD SPAHR LLP  
1735 Market Street, 51<sup>st</sup> Floor  
Philadelphia, PA 19103-7599  
Telephone: 215.864.8109  
Facsimile: 215.864.8999  
Email: rzoncal@ballardspahr.com  
auerbachb@ballardspahr.com

Attorneys for Plaintiff ARIES  
GASIFICATION, LLC

Ballard Spahr LLP  
2029 Century Park East, Suite 800  
Los Angeles, California 90067-2909

**DEMAND FOR JURY TRIAL**

Aries respectfully requests a trial by jury on all claims.

Dated: July 9, 2020

BALLARD SPAHR LLP

By: /s/ Vincent Cox

Vincent Cox (SBN 070511)  
2029 Century Park East, Suite 800  
Los Angeles, CA 90067-2909  
Telephone: 424.204.4362  
Facsimile: 424.204.4350  
Email: coxv@ballardspahr.com

Lynn E. Rzonca (*pro hac vice* to be filed)  
Brian S.S. Auerbach (*pro hac vice* to be filed)  
BALLARD SPAHR LLP  
1735 Market Street, 51<sup>st</sup> Floor  
Philadelphia, PA 19103-7599  
Telephone: 215.864.8109  
Facsimile: 215.864.8999  
Email: rzoncal@ballardspahr.com  
auerbachb@ballardspahr.com

Attorneys for Plaintiff ARIES  
GASIFICATION, LLC

Ballard Spahr LLP  
2029 Century Park East, Suite 800  
Los Angeles, California 90067-2909

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28