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8 Attorneys for Plaintiff  
9 Meridian Rapid Defense Group LLC

10  
11 **IN THE UNITED STATES DISTRICT COURT**  
12 **CENTRAL DISTRICT OF CALIFORNIA**

13 MERIDIAN RAPID DEFENSE GROUP  
14 LLC, a California limited liability  
15 company,

16 Plaintiff,

17 v.

18 DELTA SCIENTIFIC CORPORATION,  
19 a California corporation,

20 Defendant.

Case No.: 2:23-cv-07222

**COMPLAINT FOR PATENT  
INFRINGEMENT**

[DEMAND FOR JURY TRIAL]

1 Plaintiff Meridian Rapid Defense Group LLC (“Meridian”) files this Complaint in  
2 this Central District of California (“District”) against Defendant Delta Scientific  
3 Corporation (“Defendant”) for infringement of United States Patent Nos. 7,918,622 (“the  
4 ’622 patent”) and 8,215,866 (“the ’866 patent”).

### 5 **THE PARTIES**

6 1. Plaintiff Meridian Rapid Defense Group LLC is a California limited liability  
7 company with its principal place of business at 177 E. Colorado Blvd., Suite 200,  
8 Pasadena, California 91105.

9 2. On information and belief, Delta Scientific Corporation is a California  
10 Corporation with its headquarters at 40355 Delta Lane, Palmdale, California 93551.<sup>1</sup>

### 11 **JURISDICTION AND VENUE**

12 3. This Court has subject matter jurisdiction under 38 U.S.C. § 1331 and  
13 1338(a) because this complaint arises under the federal patent laws of the United States,  
14 35 U.S.C. § 1 *et seq.*

15 4. This Court has personal jurisdiction over Defendant because Defendant has  
16 committed acts of patent infringement in this District. Upon information and belief,  
17 Defendant makes, uses, offers for sale and sells portable barriers and barrier systems,  
18 including but not limited to, the TB100 portable bollard that utilize Meridian’s patented  
19 technology in this District, in California, and elsewhere. Defendant, therefore, has  
20 systematic and continuous contacts with this District, regularly transacts business within  
21 this District, and regularly and purposefully avails itself of the benefits of this District.  
22 This Court further has personal jurisdiction over Defendant generally because Defendant  
23 maintains a regular and established place of business in the District (*e.g.*, its headquarters  
24 in Palmdale, CA) and Defendant regularly conducts business in this District. Defendant,  
25 therefore, has established minimum contacts within this District such that the exercise of  
26 jurisdiction over Defendant would not offend traditional notions of fair play and  
27

28 <sup>1</sup> <https://deltascientific.com/> (Last Visited on August 14, 2023)

1 substantial justice.

2 5. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391(b) and (c), and  
3 1400(b) because Defendant has committed (and continues to commit) acts of patent  
4 infringement complained of herein in this District, and has a regular and established place  
5 of business in this District.

6 **MERIDIAN'S TECHNOLOGY AND PATENTS**

7 6. Meridian was founded in 2006. Through years of hard work, Peter Whitford  
8 and his company, Meridian, pioneered the design and development of mobile barrier  
9 solutions that make people, communities, and places safer by providing unique solutions  
10 certified to the highest standards. See <https://www.betterbarriers.com/about-us/>

11 7. One such barrier is Meridian's Archer 1200 barrier, which can be rapidly  
12 deployed alone or in sets that are best suited for the situation or event. Figure 1 below,  
13 for example, depicts Archer 1200 barriers in a configuration that permits individuals to  
14 walk between the barriers.



21 Figure 1<sup>2</sup>

22 8. Alternatively, Figure 2 depicts the Archer 1200 barriers coupled together  
23 with one or more wires, such that the barriers collectively work together to stop a hostile  
24 vehicle.

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28 <sup>2</sup> [https://www.youtube.com/watch?v=NhI\\_FN3Whgc](https://www.youtube.com/watch?v=NhI_FN3Whgc) (Meridian Keeping Communities and Events Safe – Elkhart Lake, WI) (last visited August 19, 2023)

Figure 2<sup>3</sup>

9. Meridian’s barriers are both effective and versatile. They can be configured and deployed in minutes by one person without need for heavy equipment such as forklifts and cranes, and with no need for hydraulics or electricity. Meridian’s products are also deployed outside of the United States including in Canada, New Zealand, and Australia. Meridian’s barriers are relied on by name-brand organizations, such as the U.S. Air Force, Chicago Police, Arizona State University, the Cincinnati Bengals, NATO, and the Rose Bowl Parade and game—just to name a few.

10. Meridian’s barriers have been awarded numerous safety certifications, including being certified as Qualified Anti-Terrorism Technology (QATT) by the U.S. Department of Homeland Security pursuant to The SAFETY Act of 2002, and crash test certifications such as the European PAS-68 certification, the United States ASTM, and an IWA-14 rating. See [www.betterbarriers.com/certifications/](http://www.betterbarriers.com/certifications/). Meridian’s products are 100% American made from 100% American steel. [www.betterbarriers.com/about-us/](http://www.betterbarriers.com/about-us/)

11. Meridian’s founder, Peter Whitford, conceived and patented numerous inventions to protect Meridian’s revolutionary technology, including United States patent numbers 7,918,622 (“the ’622 patent”) (**Exhibit 1**) and 8,215,866 (“the ’866 patent”) (**Exhibit 2**) (collectively, the “Asserted Patents”). As their titles suggest, those patents are directed to portable perimeter defense barriers and systems.

12. Meridian’s technology attracted the interest of other companies including

<sup>3</sup> <https://www.youtube.com/watch?v=hcKntn8M3Ms> (last visited August 19, 2023)

1 Defendant Delta Scientific Corporation, as described below.

2 **DEFENDANT’S INFRINGING PRODUCTS**

3 13. Defendant describes itself as the “world’s leading manufacturer of vehicle  
4 access control equipment.” [www.deltascientific.com/about-us/](http://www.deltascientific.com/about-us/). For many years  
5 Defendant manufactured and sold what it describes as “portable barriers,” such as the  
6 MP5000, DSC1000, and DSC1100 shown below.<sup>4</sup>



13 Figure 3 (Defendant’s MP5000)



20 Figure 4 (Defendant’s DSC1000)



27 Figure 5 (Defendant’s DSC1100)

28 <sup>4</sup> [www.deltascientific.com/high-security/portable-barriers/](http://www.deltascientific.com/high-security/portable-barriers/) (last visited August 19, 2023)

1           14. These barriers may be “portable” in the sense they can be moved with heavy  
2 equipment, but typically cannot be deployed absent such equipment. Also, these barriers  
3 do not permit pedestrians to easily pass through and, when installed, are typically left in  
4 place for longer periods of time.

5           15. Upon information and belief, Defendant recently began making, using,  
6 offering for sale, and selling a “new” type of barrier, the “Portable Bollard TB100.” See  
7 Figs. 6 & 7, below. Unlike Defendant’s earlier barriers, the TB100 barrier is smaller, has  
8 an “omni-directional design,” and can be deployed in “heavily traveled narrow  
9 walkways,” for example, to “slow[], trip[], and arrest[] intruding vehicles without  
10 difficulty of a major barricade installation.”<sup>5</sup> This barrier can also be linked together with  
11 a cable system to create immediate protection for a span of road or other area. *Id.*  
12 Defendant represents that its “new” TB100 bollard is “patent-pending.”<sup>6</sup>



20  
21 Figure 6



22 Figure 7

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### MERIDIAN’S NOTICE TO DEFENDANT

16. On June 8, 2023, after learning of Defendant’s TB100 product, Meridian sent  
a letter to Defendant notifying Defendant that the TB100 (and other such products)  
infringed the Asserted Patents: “With this letter, we put you on notice that Meridian has  
certain intellectual property rights relating to portable barriers and that we [Meridian]

<sup>5</sup> <https://deltascientific.com/product/bollard-tb100/> (last visited August 19, 2023)

<sup>6</sup> [www.deltascientific.com/high-security/portable-barriers](http://www.deltascientific.com/high-security/portable-barriers) (last visited August 19, 2023)

1 believe[s] products such as the TB100 bollard are in contravention of [those] rights.” See  
2 June 8, 2023 Hilton letter to Defendant’s legal department (**Exhibit 3**). Meridian also  
3 identified both the ’622 and ’866 patent and asked that Defendant “review th[ose] patents  
4 and respond ... to discuss resolution and to potentially avoid the need for Meridian to take  
5 action to enforce its patent rights.” *Id.*

6 17. Defendant responded through outside counsel on June 21, 2023 and  
7 requested that Meridian identify specific claims that Meridian alleged were infringed by  
8 products such as the TB100 bollard. See June 21, 2023 Marantidis letter to Hilton  
9 (**Exhibit 4**).

10 18. On July 10, 2023, Meridian responded by identifying 16 claims of the ’622  
11 patent and 6 claims of the ’866 patent that it believed were infringed by the TB100 bollard.  
12 July 10, 2023 Hilton letter to Marantidis (**Exhibit 5**).

13 19. On July 31, 2023, Defendant’s counsel responded and, among other things,  
14 denied infringement and concluded that we “do not believe that there is an issue that  
15 requires resolution.” July 31, 2023 Marantidis letter to Hilton (**Exhibit 6**).

16 20. Meridian invested significant resources to develop and protect its pioneering  
17 technology. Defendant is at least making, using, selling, and offering for sale its TB100  
18 bollard and similar products (“Accused Products”) that, upon information and belief,  
19 infringe Meridian’s Asserted Patents. Defendant denies infringement and, moreover,  
20 made clear that it intends to continue to sell and profit from the Accused Products.  
21 Meridian, therefore, brings this lawsuit to enforce its legal rights.

22 **COUNT I**

23 **INFRINGEMENT OF U.S. PATENT NO. 7,918,622**

24 21. Meridian incorporates by reference Paragraphs 1 through 20 as if fully set  
25 forth herein.

26 22. The ’622 Patent, titled “Portable Perimeter Defense Systems,” issued by the  
27 United States Patent and Trademark Office on April 5, 2011. A true and correct copy of  
28 the ’622 Patent is attached hereinto as **Exhibit 1**.

1 23. Meridian is the owner of the '622 Patent, with all substantive rights in and  
2 to the '622 Patent, including the sole and exclusive right to prosecute this action and  
3 enforce the '622 Patent against infringers, and to collect damages for all relevant times,  
4 including for past infringement.

5 24. The '622 Patent generally relates to portable perimeter defense systems. The  
6 claims of the '622 Patent, including claim 21, recite novel and inventive systems and  
7 methods.

8 25. For example, claim 21 of the '622 Patent recites:

9 *21. A portable perimeter defense system for stopping movement of a*  
10 *vehicle in an impact direction, the defense system comprising:*

11 *a first modular barrier;*

12 *said modular barrier comprising an upright plate being configured to*  
13 *and being formed of a material to protect against munitions and a base*  
14 *plate for positioning on a ground surface wherein said base plate*  
15 *extends generally parallel to the ground surface and said upright plate*  
16 *extends generally perpendicular to said base plate;*

17 *said base plate of said modular barrier comprising a non-planar aft*  
18 *edge configured to frictionally engage the ground surface to prevent*  
19 *horizontal movement of said modular barrier on impact, said non-*  
20 *planar aft edge extending along a portion of the width of said base*  
21 *plate.*

22 26. Defendant has directly infringed, and continues to directly infringe, literally  
23 and/or under the doctrine of equivalents, one or more claims, including claim 21, of the  
24 '622 Patent in violation of 35 U.S.C. § 271(a). For example, the accused TB100 portable  
25 bollards ("TB100") satisfy all claim limitations of one or more claims of the '622 Patent,  
26 including at least claim 21.

27 27. By way of a non-limiting example, one or multiple TB100's can be deployed,  
28 acting alone or in combination, as a portable perimeter defense system for stopping  
movement of a vehicle in an impact direction. Defendant characterizes its TB100 device(s)  
as a "portable barricade system" for "block[ing] access to temporary venues where  
vehicles can be used as weapons against large numbers of pedestrians."<sup>7</sup> The TB100 has

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<sup>7</sup> <https://deltascientific.com/product/bollard-tb100/> (last visited August 19, 2023)



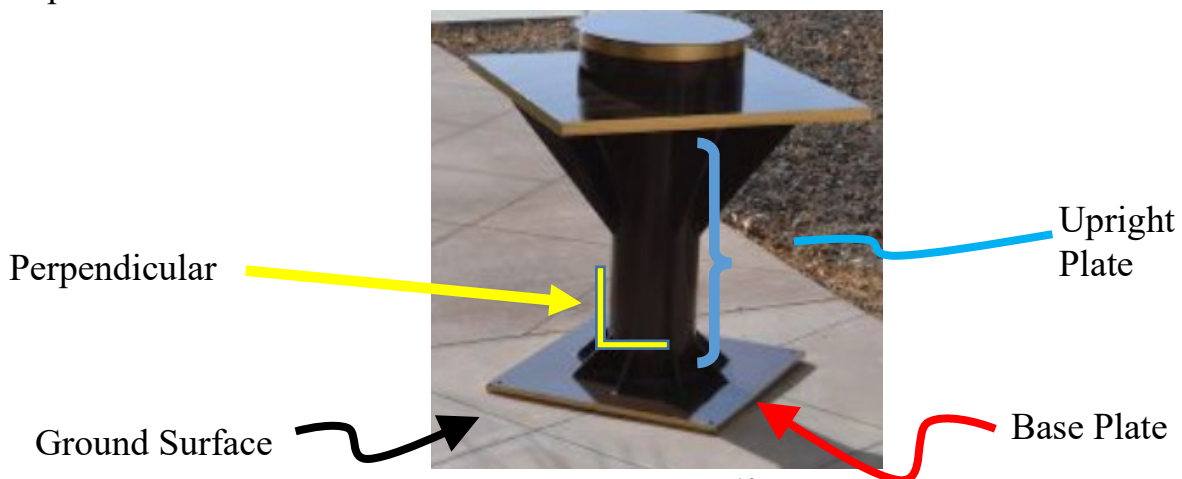
1 an “omnidirectional design [that] absorbs impact from any angle.”<sup>8</sup> See, e.g., Fig. 8.



10 Figure 8<sup>9</sup>

11 28. The TB100 is a modular barrier. The TB100 contains an upright plate being  
12 configured to and being formed of a material to protect against munitions and a base plate  
13 for positioning on a ground surface wherein said base plate extends generally parallel to  
14 the ground surface and said upright plate extends generally perpendicular to said base  
15 plate.

16 29. For example, as shown below, the TB100 comprises an upright plate and a  
17 base plate.



26 Figure 9<sup>10</sup>

27 <sup>8</sup> *Id.*

28 <sup>9</sup> *Id.*

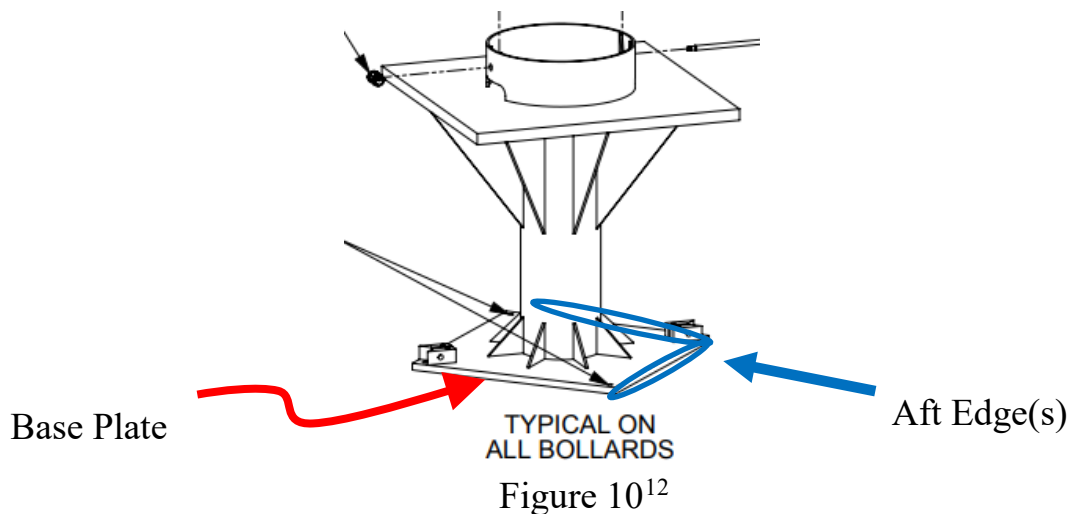
<sup>10</sup> *Id.*

30. The upright plate is configured to and being formed of a material to protect against munitions as it is made of a material configured to stop a 15,000 pound vehicle moving at 30 miles per hour.<sup>11</sup>

31. The TB100 base plate is positioned on a ground surface and extends generally parallel to the ground surface. The upright plate extends perpendicular to the base plate.

32. The TB100 base plate includes a non-planar aft edge configured to frictionally engage the ground surface to prevent horizontal movement of said modular barrier upon impact, said non-planar aft edge extending along a portion of the width of said base plate.

33. The annotated schematic diagram below illustrates exemplary non-planar aft edge(s) of the base plate. *See* Figure 10.



34. Defendant’s video exemplifying operation of the TB100 demonstrates that the aft edge(s) of each TB100 (emphasized in yellow circles) is configured to frictionally engage the ground surface to prevent horizontal movement of said modular barrier upon impact. For example, Figure 11, below, depicts a test configuration, where a heavy truck

<sup>11</sup> *Id.*

<sup>12</sup> <https://deltascientific.com/wp-content/uploads/2020/09/90485-100-TB-100-5-BOLLARD-ARRAY-GENERAL-ARRANGEMENT.pdf> (last visited August 19, 2023)

1 is configured to collide with the TB100. Figure 12, likewise, depicts the heavy truck mid-  
2 collision, where the aft edge is frictionally engaging the ground surface to prevent  
3 horizontal movement of the barrier upon impact.



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Figure 11<sup>13</sup>

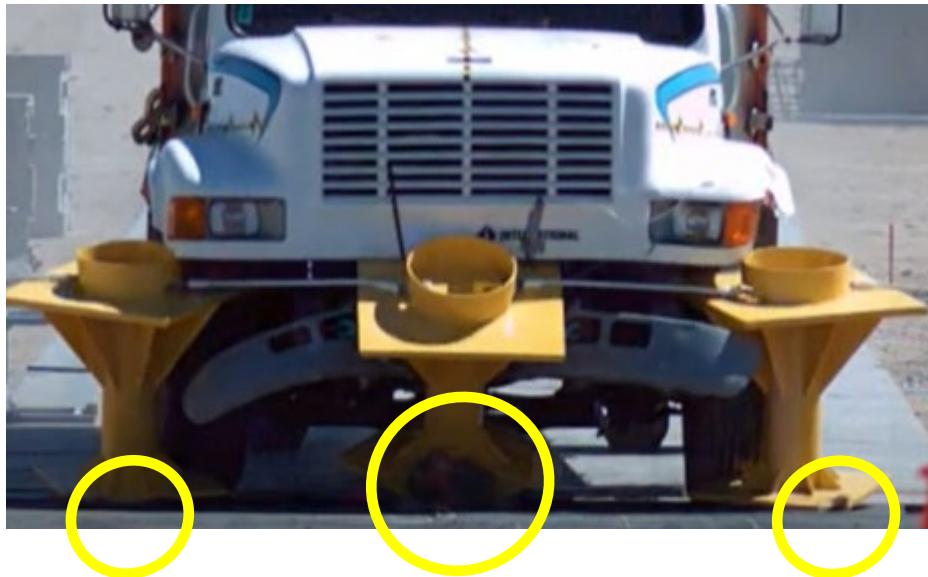


Figure 12<sup>14</sup>

35. The non-planar aft edge(s) of the TB100 extends along a portion of the width

<sup>13</sup> <https://youtu.be/WnerHwnfDEk> at 0:49 (last visited August 19, 2023)

<sup>14</sup> *Id.* at 1:22.

of the base plate as shown in Figure 13 below.

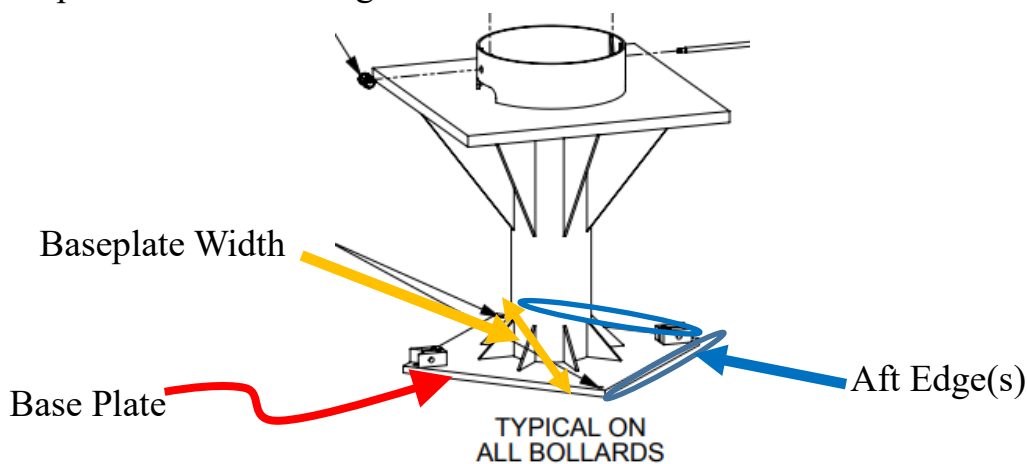


Figure 13<sup>15</sup>

36. To the extent the TB100 does not literally infringe the limitation “an upright plate being configured to and being formed of a material to protect against munitions...said upright plate extends generally perpendicular to said base plate,” the TB100 infringes this limitation under the doctrine of equivalents. For example, one of ordinary skill in the art would recognize that the TB100 is insubstantially different from the claimed limitation. Upon information and belief, the annotated “upright plate” element in the figure below performs substantially the same function in substantially the same way to obtain the same result as the claimed limitation.

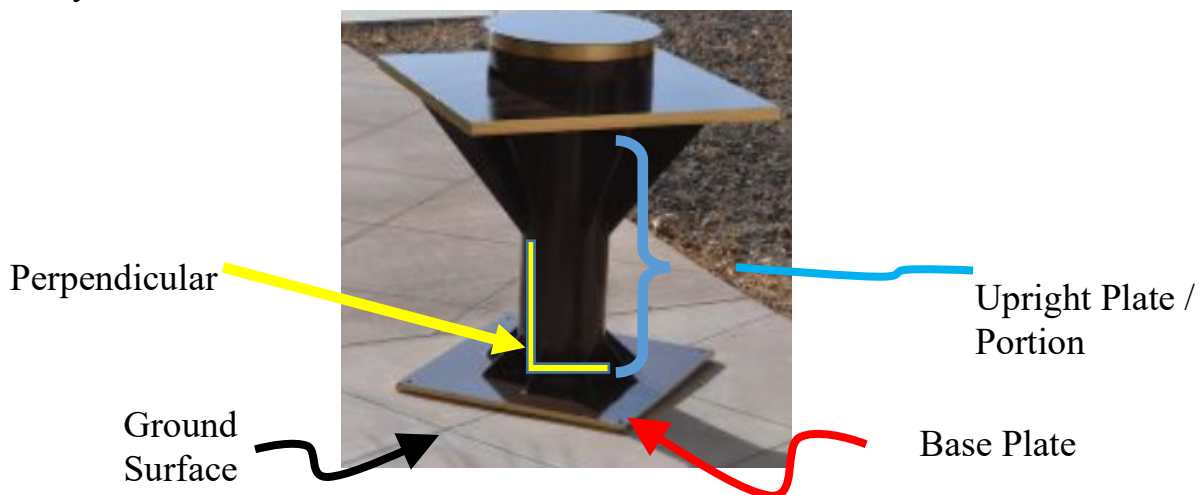


Figure 14<sup>16</sup>

<sup>15</sup> <https://deltascientific.com/wp-content/uploads/2020/09/90485-100-TB-100-5-BOLLARD-ARRAY-GENERAL-ARRANGEMENT.pdf> (last visited August 19, 2023)

<sup>16</sup> <https://deltascientific.com/product/bollard-tb100/> (last visited August 19, 2023)

1           37. For example, referring to the Figure above, the upright portion of the TB100  
2 is insubstantially different from the claimed limitation at least because it is: (1) configured  
3 such that it is upright; (2) on information and belief, formed of a material to protect against  
4 munitions as it is strong enough to assist in stopping a 15,000 pound vehicle moving at  
5 30 miles per hour<sup>17</sup>; and (3) extends perpendicular to the base plate. Moreover, the  
6 claimed “upright plate” receives the force from an impacting vehicle and transfers such  
7 force to other portions of the device. The upright portion of the TB100 operates in a  
8 substantially similar or identical manner. As depicted in Figure 12 (above), the truck  
9 makes contact with the TB100 upright portion, which transfers the force to the base plate,  
10 and in turn, to the ground.

11           38. Also, the TB100 upright portion performs substantially the same function in  
12 substantially the same way to obtain the same result as the claimed limitation. The  
13 TB100’s upright portion performs the function of providing rigidity and strength to the  
14 defense system such that when the TB100 is contacted by a vehicle the force is transferred,  
15 at least in part, to the base plate. The TB100’s upright portion is coupled to and extends  
16 perpendicular to the base plate such that it accomplishes the function in the same way as  
17 the claimed limitation. And finally, the TB100’s upright portion delivers the same result  
18 as the claimed limitation by working in combination with the rest of the device to stop a  
19 vehicle.

20           39. Defendant, therefore, upon information and belief, directly infringes (either  
21 literally or under the doctrine of equivalents) the ’622 Patent as evidenced by the  
22 paragraphs above with respect to exemplary claim 21.

23           40. Defendant also indirectly infringed and continues to indirectly infringe one  
24 or more claims of the ’622 Patent by inducing others to directly infringe the patent (as  
25 described above) by using the TB100 and similar products.

26           41. For example, Defendant took active steps, directly and/or through  
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28 <sup>17</sup> *Id.*

1 contractual relationships with others, with the specific intent to cause them to use the  
2 TB100 in a manner that infringes one or more claims of the '622 Patent.

3 42. Defendant's actions include , among other things, advising or directing  
4 customers and clients to use the TB100 in an infringing manner; advertising and  
5 promoting the use of the TB100 in an infringing manner; and/or distribution  
6 specifications and instructions (both written and video) that guide users to use the TB100  
7 in an infringing manner.

8 43. Defendant had actual knowledge of the '622 Patent, and that Meridian  
9 maintained that Defendant's TB100 bollard and similar products infringed the patent, at  
10 least as of June 8, 2023. Upon information and belief, Defendant did not modify its  
11 conduct or cease selling the Accused Products after this date and thus performed these  
12 actions with knowledge of the '622 Patent and with knowledge that the induced acts  
13 constitute infringement.

14 44. In addition to its customers, Defendant also induced its affiliates, or third-  
15 party manufacturers, shippers, distributors, retailers, or other persons acting on its or its  
16 affiliates' behalf to directly infringe (literally and/or under the doctrine of equivalents) the  
17 '622 Patent by importing, selling, offering to sell, and/or using the accused products.

18 45. Defendant has at least a significant role in placing the TB100 in the stream  
19 of commerce in the United States, including in this District. For example, Defendant  
20 directs or controls the making, shipment, and sales of the TB100 into the United States,  
21 including use of established distribution channels around the United States. Defendant  
22 directs or controls the sale of the TB100 nationwide at least through its own websites.  
23 Defendant took active steps, directly and/or through contractual relationships with others,  
24 with the specific intent to cause such persons to import, sell, or offer to sell the TB100 in  
25 a manner that infringes the '622 Patent, including but not limited to directing, facilitating,  
26 or influencing its affiliates or third-party manufacturers, shippers, distributors, retailers,  
27 or other persons acting on its or their behalf to import, sell, or offer to sell the accused  
28 product in an infringing manner. Defendant performed these actions with knowledge of

1 the '622 Patent and with knowledge the induced actions would constitute infringement.

2 46. Defendant's infringement has caused and will continue to cause substantial  
3 and irreparable damage to Meridian. Meridian, therefore, is entitled to injunctive relief  
4 under 35 U.S.C. § 283.

5 47. In addition to injunctive relief, Defendant's acts of infringement have  
6 damaged Meridian in an amount to be proven at trial, including, upon information and  
7 belief, lost profits, but in no event less than a reasonable royalty.

8 48. Defendant's infringement is on-going and has been willful since Defendant's  
9 actions were done with knowledge of the '622 Patent and with knowledge that at least  
10 Defendant's TB100 bollard and/or the use of that product infringed the '622 Patent.  
11 Meridian is entitled to an award of up to treble damages under 35 U.S.C. § 284.

12 49. Due to Defendant's willful infringement, this case is exceptional, and  
13 Meridian is entitled to an award of its reasonable attorneys' fees pursuant to  
14 35 U.S.C. § 285.

## 15 COUNT II

### 16 INFRINGEMENT OF U.S. PATENT NO. 8,215,866

17 50. Meridian incorporates by reference Paragraphs 1 through 49 as if fully set  
18 forth herein.

19 51. The '866 Patent, titled "Portable Perimeter Defense Barrier And System,"  
20 issued by the United States Patent and Trademark Office on July 10, 2012. A true and  
21 correct copy of the '866 Patent is attached hereinto as **Exhibit 2**.

22 52. Meridian is the owner of the '866 Patent, with all substantive rights in and  
23 to the '866 Patent, including the sole and exclusive right to prosecute this action and  
24 enforce the '866 Patent against infringers, and to collect damages for all relevant times,  
25 including for past infringement.

26 53. The '866 Patent generally relates to portable perimeter defense barriers and  
27 systems. The claims of the '866 Patent, including claim 49, recite novel and inventive  
28 systems and methods.

1 54. For example, claim 49 of the '866 Patent recites:

2 49. *A portable perimeter defense system for stopping movement of a*  
3 *vehicle in an impact direction, the defense system comprising:*

4 *a first modular barrier;*

5 *said modular barrier comprising an upright plate and a base plate for*  
6 *positioning on a ground surface wherein said upright plate extends*  
7 *generally perpendicular to said base plate and a wheel assembly*  
8 *pivotaly attached to said base plate such that said wheel assembly*  
9 *pivots between engaged and disengaged positions;*

10 *said base plate having an aft and fore edge wherein said fore edge,*  
11 *facing the impact direction, comprises a vehicle engage interface in the*  
12 *form of a nonlinear configuration extending along a portion of said*  
13 *base plate fore edge wherein, under sufficient impact forces, said*  
14 *modular barrier pivots about said aft edge and said fore edge engages*  
15 *an impacting vehicle.*

16 55. Defendant has directly infringed, and continues to directly infringe, literally  
17 and/or under the doctrine of equivalents, one or more claims, including claim 49, of the  
18 '866 Patent in violation of 35 U.S.C. § 271(a). For example, the accused TB100 Portable  
19 bollards ("TB100") satisfy all claim limitations of one or more claims of the '866 Patent,  
20 including at least claim 49.

21 56. By way of a non-limiting example, one or multiple TB100's can be  
22 deployed, acting alone or in combination, as a portable perimeter defense system for  
23 stopping movement of a vehicle in an impact direction. Defendant characterizes its  
24 TB100 device(s) as a "portable barricade system" for "block[ing] access to temporary  
25 venues where vehicles can be used as weapons against large numbers of pedestrians."<sup>18</sup>  
26 The TB100 has an "omnidirectional design [that] absorbs impact from any angle."<sup>19</sup> *See,*  
27 *e.g., Fig. 15.*

28 <sup>18</sup> <https://deltascientific.com/product/bollard-tb100/>

<sup>19</sup> *Id.*





Figure 15<sup>20</sup>

57. As depicted in the annotated Figure 16 below, the TB100 is a modular barrier comprising an upright plate and a base plate for positioning on a ground surface.

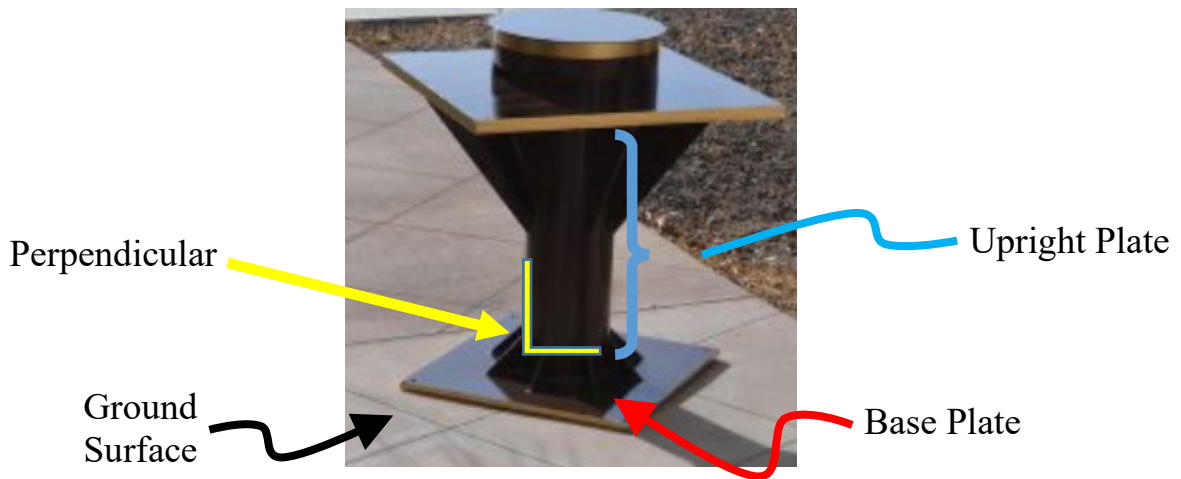


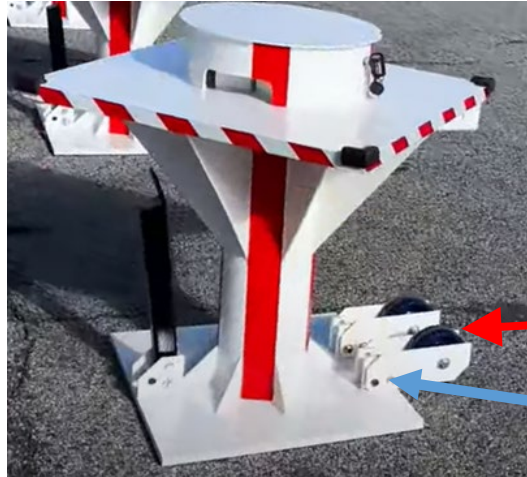
Figure 16<sup>21</sup>

58. The TB100's upright plate extends generally perpendicular to the base plate.

59. As depicted in Figure 17 below, the TB100 also includes a wheel assembly pivotally attached to the base plate.

<sup>20</sup> <https://deltascientific.com/product/bollard-tb100/>

<sup>21</sup> <https://deltascientific.com/product/bollard-tb100/>

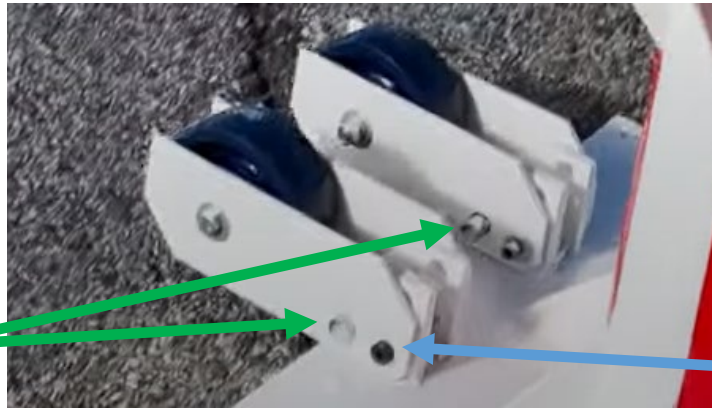


Wheel assembly

Wheel pivot point

Figure 17<sup>22</sup>

60. Figure 18 below depicts a zoomed-in image of the TB100 wheel assembly.



Pin hole

Wheel pivot point

Figure 18<sup>23</sup>

61. As readily apparent, the TB100 wheel assembly, on information and belief, appears to operate in an identical manner to at least one exemplary embodiment depicted in Figure 12 of the '622 Patent (below).

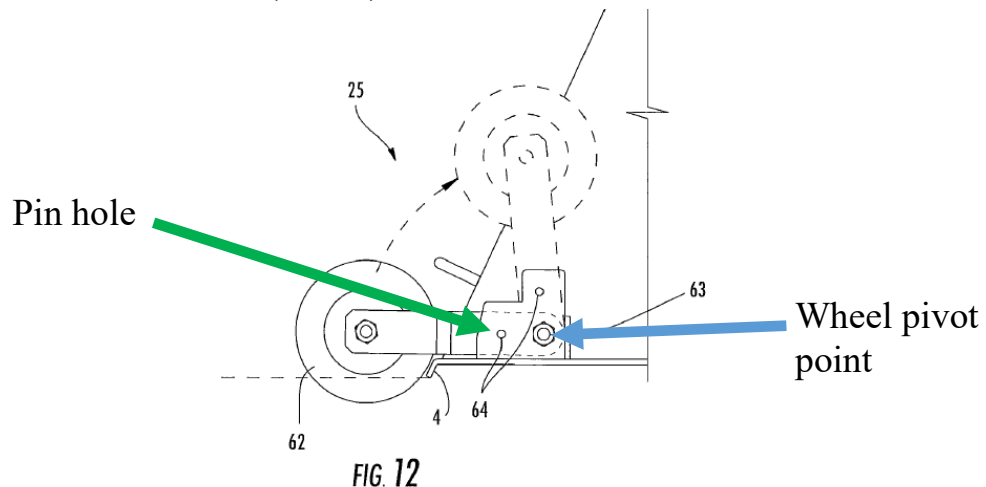


FIG. 12

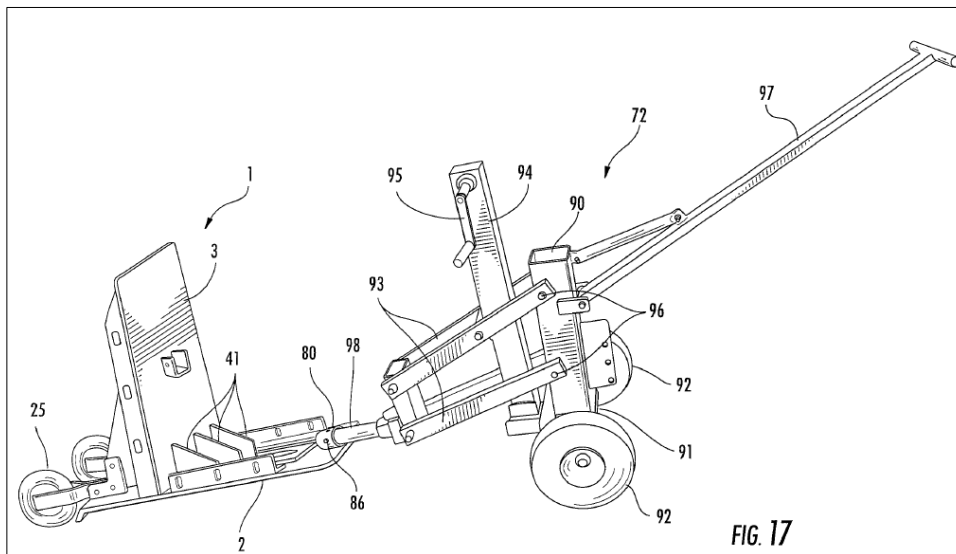
<sup>22</sup> <https://www.youtube.com/watch?v=yglxFczVztg> at 0:04 – 0:10.

<sup>23</sup> <https://www.youtube.com/watch?v=yglxFczVztg> at 0:04.

1           62. Moreover, on information and belief, Figure 19 below illustrates how  
2 Defendant intends for the TB100 wheel assembly to be implemented and utilized in an  
3 identical manner as certain embodiments, such as Figure 17, in the '622 Patent.



12  
13 Figure 19<sup>24</sup>



24 '622 Pat., Figure 17

25           63. On information and belief, the TB100's wheel assembly pivots (and/or is  
26 capable of pivoting) between at least an engaged and disengaged position.

27  
28 <sup>24</sup> <https://www.youtube.com/watch?v=yg1xFczVztg> at 0:35.

64. The TB100's base plate has aft and fore edges. See Figure 20 (below). The TB100's fore edge(s) face the impact direction.

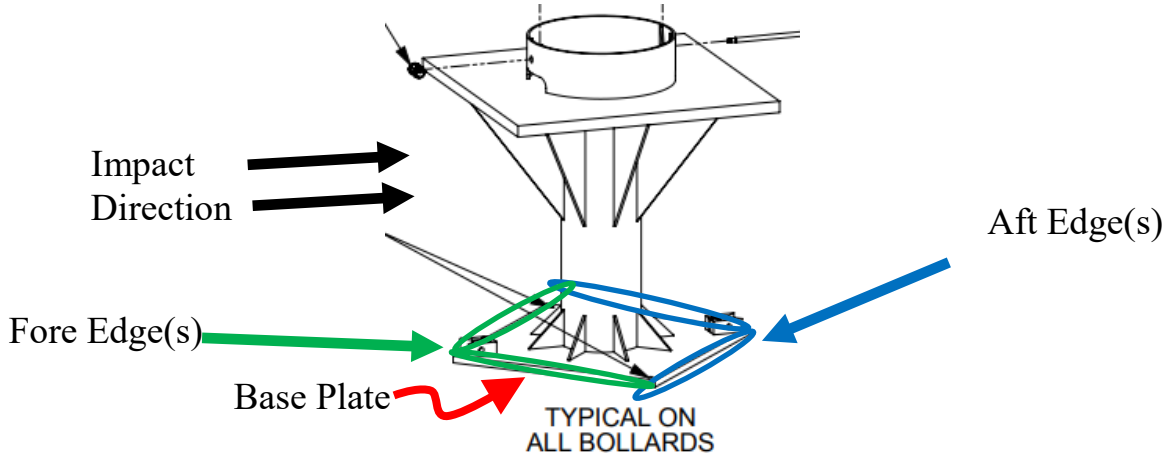


Figure 20<sup>25</sup>

65. As annotated in Figure 21, below, the TB100's fore edges comprise a vehicle engaging interface in the form of a nonlinear configuration extending along a portion of said base plate. Figure 21 depicts a test configuration, where a heavy truck is configured to collide with the TB100.

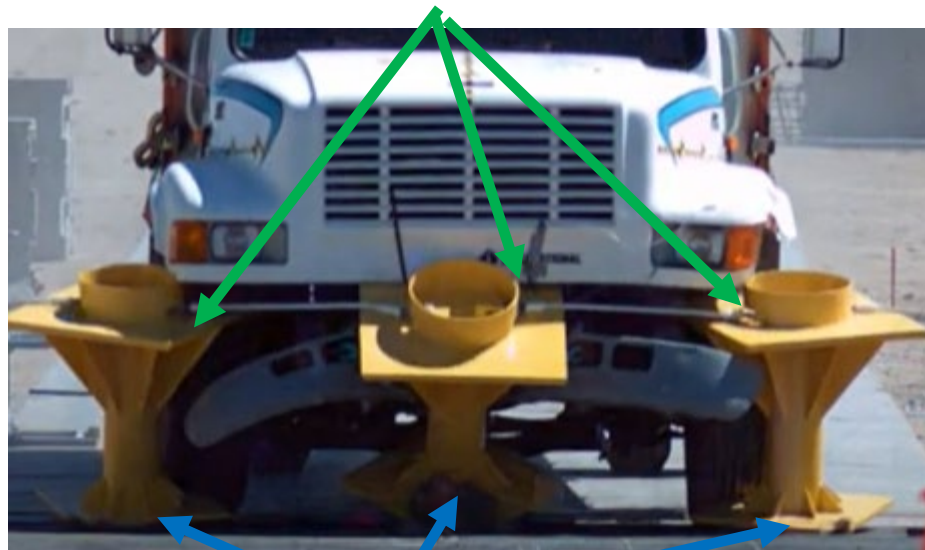


Figure 21<sup>26</sup>

<sup>25</sup> <https://deltascientific.com/wp-content/uploads/2020/09/90485-100-TB-100-5-BOLLARD-ARRAY-GENERAL-ARRANGEMENT.pdf>

<sup>26</sup> <https://youtu.be/WnerHwnfDEk> at 0:49

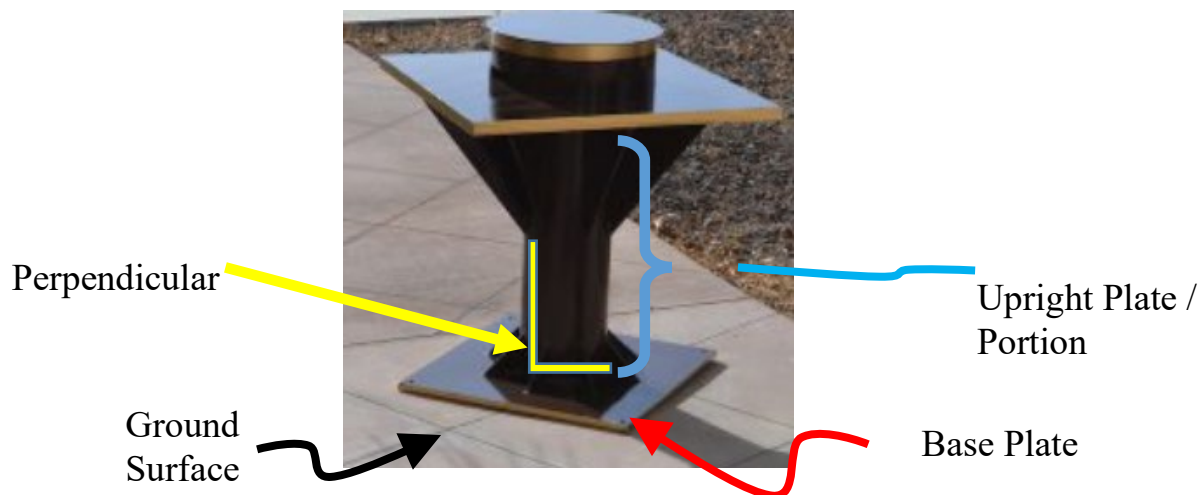
1           66. Figure 22 below depicts the heavy truck mid-collision, where, upon  
2 sufficient impact force, the barrier pivots about the aft edges (blue) and the fore edges  
3 (green) engage the impacting vehicle.



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14           Figure 22<sup>27</sup>

15           67. To the extent the TB100 does not literally infringe the limitation “an upright  
16 plate and a base plate ... wherein said upright plate extends generally perpendicular to  
17 said base plate,” the TB100 infringes this limitation under the doctrine of equivalents.  
18 For example, one of ordinary skill in the art would recognize that the TB100 is  
19 insubstantially different from the claimed limitation. Upon information and belief, the  
20 annotated “upright plate” element in the figure below performs substantially the same  
21 function in substantially the same way to obtain the same result as the claimed limitation.

22  
23  
24  
25  
26  
27  
28           <sup>27</sup> *Id.* at 1:22.



9 Figure 23<sup>28</sup>

10 68. For example, referring to the Figure above, the upright portion of the TB100  
 11 is insubstantially different from the claimed limitation at least because it is: (1) configured  
 12 such that it is upright; (2) on information and belief, formed of a material to protect against  
 13 munitions as it is strong enough to assist in stopping a 15,000 pound vehicle moving at  
 14 30 miles per hour<sup>29</sup>; and (3) extends generally perpendicular to the base plate. Moreover,  
 15 the claimed “upright plate” receives the force from an impacting vehicle and transfers  
 16 such force to other portions of the device. The upright portion of the TB100 operates in a  
 17 substantially similar or identical manner. As depicted in Figures 21 and 22 (above), the  
 18 truck makes contact with the TB100 upright portion, which transfers the force to the base  
 19 plate, and in turn, to the ground.

20 69. Also, the TB100 upright portion performs substantially the same function in  
 21 substantially the same way to obtain the same result as the claimed limitation. The  
 22 TB100’s upright portion performs the function of providing rigidity and strength to the  
 23 defense system such that when the TB100 is contacted by a vehicle the force is transferred,  
 24 at least in part, to the base plate. The TB100’s upright portion extends generally  
 25 perpendicular to the base plate such that it accomplishes the function in the same way as  
 26 the claimed limitation. And finally, the TB100’s upright portion delivers the same result

27 <sup>28</sup> <https://deltascientific.com/product/bollard-tb100/>

28 <sup>29</sup> *Id.*

1 as the claimed limitation by working in combination with the rest of the device to stop a  
2 vehicle.

3 70. Defendant, therefore, upon information and belief, directly infringes (either  
4 literally or under the doctrine of equivalents) the '866 Patent as evidenced by the  
5 paragraphs above with respect to exemplary claim 49.

6 71. Defendant also indirectly infringed and continues to indirectly infringe one  
7 or more claims of the '866 Patent by inducing others to directly infringe the patent (as  
8 described above) by using the TB100 and similar products.

9 72. For example, Defendant took active steps, directly and/or through  
10 contractual relationships with others, with the specific intent to cause them to use the  
11 TB100 in a manner that infringes one or more claims of the '866 Patent.

12 73. Defendant's actions include, among other things, advising or directing  
13 customers and clients to use the TB100 in an infringing manner; advertising and  
14 promoting the use of the TB100 in an infringing manner; and/or distribution specifications  
15 and instructions (both written and video) that guide users to use the TB100 in an infringing  
16 manner.

17 74. Defendant had actual knowledge of the '866 Patent, and that Meridian  
18 maintained that Defendant's TB100 bollard and similar products infringed the patent, at  
19 least as of June 8, 2023. Upon information and belief, Defendant did not modify its  
20 conduct or cease selling the Accused Products after this date and thus performed these  
21 actions with knowledge of the '866 Patent and with knowledge that the induced acts  
22 constitute infringement.

23 75. In addition to its customers, Defendant also induced its affiliates, or third-  
24 party manufacturers, shippers, distributors, retailers, or other persons acting on its or its  
25 affiliates' behalf to directly infringe (literally and/or under the doctrine of equivalents) the  
26 '866 Patent by importing, selling, offering to sell, and/or using the accused products.

27 76. Defendant has at least a significant role in placing the TB100 in the steam of  
28 commerce in the United States, including in this District. For example, Defendant directs

1 or controls the making, shipment, and sales of the TB100 into the United States, including  
2 use of established distribution channels around the United States. Defendant directs or  
3 controls the sale of the TB100 nationwide at least through its own websites. Defendant  
4 took active steps, directly and/or through contractual relationships with others, with the  
5 specific intent to cause such persons to import, sell, or offer to sell the TB100 in a manner  
6 that infringes the '866 Patent, including but not limited to directing, facilitating, or  
7 influencing its affiliates or third-party manufacturers, shippers, distributors, retailers, or  
8 other persons acting on its or their behalf to import, sell, or offer to sell the accused  
9 product in an infringing manner. Defendant performed these actions with knowledge of  
10 the '622 Patent and with knowledge the induced actions would constitute infringement.

11 77. Defendant's infringement has caused and will continue to cause substantial  
12 and irreparable damage to Meridian. Meridian, therefore, is entitled to injunctive relief  
13 under 35 U.S.C. § 283.

14 78. In addition to injunctive relief, Defendant's acts of infringement have  
15 damaged Meridian in an amount to be proven at trial, including, upon information and  
16 belief, lost profits, but in no event less than a reasonable royalty.

17 79. Defendant's infringement is on-going and has been willful since Defendant's  
18 actions were done with knowledge of the '866 Patent and with knowledge that at least  
19 Defendant's TB100 bollard and/or the use of that product infringed the '866 Patent.  
20 Meridian is entitled to an award of up to treble damages under 35 U.S.C. § 284.

21 80. Due to Defendant's willful infringement, this case is exceptional, and  
22 Meridian is entitled to an award of its reasonable attorneys' fees pursuant to  
23 35 U.S.C. § 285.

#### 24 **PRAYER FOR RELIEF**

25 WHEREFORE, Meridian respectfully requests that this Court grant and order the  
26 following relief:

27 A. Judgment in favor of Meridian that Defendant has directly infringed, either  
28 literally or under the doctrine of equivalents, one or more claims of the '622 Patent;



1 B. Judgment in favor of Meridian that Defendant has induced infringement of  
2 the '622 Patent;

3 C. Judgment in favor of Meridian that Defendant has directly infringed, either  
4 literally or under the doctrine of equivalents, one or more claims of the '866 Patent;

5 D. Judgment in favor of Meridian that Defendant has induced infringement of  
6 the '866 Patent;

7 E. A permanent injunction enjoining Defendant and its officers, directors,  
8 agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all  
9 others acting in concert therewith from infringement of each of the '622 and '866 Patents  
10 or, in the alternative if the Court finds that an injunction is not warranted, Meridian  
11 requests an award of post-judgment damages adequate to compensate for future  
12 infringement;

13 F. An award of damages in an amount adequate to compensate Meridian for  
14 Defendant's infringement each of the '622 and '866 Patents;

15 G. Judgment that Defendant's infringement was willful and that the Court  
16 award treble damages for the period of such willful infringement pursuant to at least 35  
17 U.S.C. § 284;

18 H. A finding that this is an exceptional case under 35 U.S.C. § 285 that warrants  
19 awarding Meridian its costs, expenses, disbursements, and reasonable attorneys' fees  
20 relating to Defendant's infringement under § 285 and all other applicable statutes, rules,  
21 and common law;

22 I. An award of pre-judgment and post-judgment interest; and

23 J. Such other relief in law or equity as this Court may deem just and proper.

24 Dated: August 31, 2023

**BARNES & THORNBURG LLP**

By: /s/ Roya Rahmanpour

Roya Rahmanpour

*Attorneys for Plaintiff Meridian  
Rapid Defense Group LLC*

**DEMAND FOR JURY TRIAL**

Meridian requests a trial by jury of all issues raised herein that are triable by a jury.

Dated: August 31, 2023

**BARNES & THORNBURG LLP**

By: /s/ Roya Rahmanpour

Roya Rahmanpour

*Attorneys for Plaintiff Meridian  
Rapid Defense Group LLC*