EXHIBIT A

Supplemental Opinion of John Berninger

I. Introduction

1. It is my understanding that under the Federal Rules of Civil Procedure, I am required to supplement my previous expert reports in this case, including my CV. An updated copy of my CV is attached hereto as Exhibit A. I am still being compensated $170/hour. The additional reasons for this supplemented report are discussed below.
2. It is also my understanding that, since I offered my previous opinions in this case, the Court entered a Memorandum Opinion and Order construing nine (9) terms of US 6,793,469 (the '469 patent) (the Order hereinafter referred to as the "Claim Construction"), and also that a reexamination of the '469 patent occurred, which culminated in a decision from the Board of Patent Appeals and Interferences (hereinafter the "BPAI Decision").
3. I have been asked by Intex's attorneys to review the Claim Construction and the BPAI Decision, and to supplement my opinion as necessary based on the Claim Construction and the BPAI Decision, and in view of additional materials contained in the record, including the '469 patent, the prosecution history of the '469 patent, the reexamination of the '469 patent as well as prosecution histories from applications related to the '469 patent.
4. After reviewing these materials, Intex's attorneys asked me to provide my opinions as to whether Intex's accused products infringe the '469 patent under: (1) the Court's Claim Construction; and (2) under Intex's proposed claim construction of the terms "socket" and "pump body".

5. I have also been asked to provide my opinions on whether certain products of competitors infringe the '469 patent under: (1) the Court's Claim Construction; and (2) under Intex's proposed claim construction of the terms "socket" and "pump body". I have also been asked to provide my opinions on whether certain TWW products are covered by the claims of the '469 patent.

6. My opinions are provided in detail below. However, briefly, it is my opinion that Intex's accused products do not infringe claims 14-17 of the '469 patent, either literally or under the doctrine of equivalents. This is my opinion under the Magistrate's Claim Construction. This is also my opinion under Intex's proposed definitions of "pump body" and "socket".

II. The Claim Constructions

7. On Mar. 28, 2008, the Unites States District Court for the District of Columbia issued a Memorandum Opinion and Order in which nine (9) terms of the '469 patent were defined. These are:

   a. Socket – an opening or hollow that forms a holder for something.

   b. Pump body – the main part of the pump.

   c. Electric pump – an electronically powered machine or device for raising, compressing, or transferring fluids, including gasses. The Court also found "that the electric pump refers to everything including the housing, which also includes the pump body referring to the parts that actually make the pump."

   d. Air outlet – a passage that permits air to travel out of the pump.

e. Connected to – means that the electric pump must be coupled or joined, not merely touching.

f. Connector – something that permits passage of electric current.

g. Matched – geometrically matched.

h. Received – positioned or oriented.

i. Inflatable body – a substantially airtight structure that expands when filled with air or other gasses.

8. It is my understanding that of these nine (9) terms, Intex disputes the Magistrate's Claim Construction of "socket" and "pump body."

9. Intex's proposed definition of the term "socket" is: "a structure that fits and holds onto an inserted part (i.e., the claimed electric pump) so that the structure and the part are detachably connected to each other."

10. Intex's proposed definition of the term "pump body" is: "a housing that surrounds the other components of the pump," or "the main part of the electric pump, including the housing, and to be a separate and distinct element from the air outlet."

III. Non-Infringement under the Magistrate's Claim Construction

11. In its Claim Construction the Court defined several terms, including the following two: "socket" as "an opening or hollow that forms a holder for something"; and "pump body" as "the main part of the pump." Under these definitions, the Intex designs include a pump body but do not include a socket, and therefore do not infringe claims 14-17 of the '469 patent.

12. In its Claim Construction the Court also defined "electric pump" as "an electronically powered machine or device for raising, compressing, or transferring fluids, including

gasses." The court also noted: ". . . that the electric pump refers to everything including the housing, which also includes the pump body referring to the parts that actually make the pump."

13. I investigated the definition "main part of the pump" for context in usage in: (1) the '469 Patent; (2) the prosecution history of the '469 Patent; (3) the prosecution history of the reexamination of the '469 patent; and (4) in any other patents, patent applications, and prosecution histories thereof, that are related to the '469 patent and that also use the term "pump body."

14. During prosecution of U.S. App. No. 09/738,331 ("the '331 application" – which is the application that became the '469 patent), TWW responded on July 11, 2003 to an office communication of Feb. 11, 2003, and amended claims 17 and 18 (which became 14 and 16) to change the phrase "electric pump connected to the socket" to read "electric pump, including a pump body and an air outlet, connected to the socket . . . wherein the pump body is wholly or partially located in the socket." Thus, the electric pump was defined to include (at least) a pump body and an air outlet, and clarification was made that the pump body had to be located in the socket. This was done to overcome the examiner's rejection in view of the Feldman patent (U.S. 5,890,882) which included a housing 2, an adaptor 38, and a valve 52. TWW argued that "only the adapter 38 (i.e. air outlet) will be located in the valve 52 (i.e. socket) after insertion, and the inflator housing 2 (i.e. pump body) will be located outside the valve." See July 11, 2003 Response and Fig. 6 of Feldman, (below). Therefore, TWW explicitly identifies the pump body as a housing.

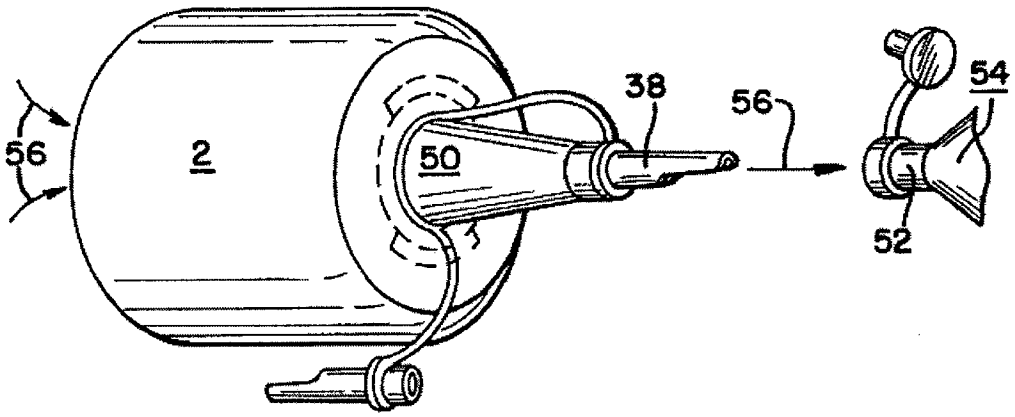


Fig. 6 from Feldman 5,890,882

15. TWW made identical arguments during reexamination. In response to a rejection from the examiner, TWW quoted the argument it made to the patent examiner in the prosecution of the '331 application and explained its reasoning for making that argument: "In response, the Patentee amended the claims to include the requirement that (1) the electric pump include[es] a pump body and an air outlet, (2) wherein the pump body is wholly or partially located in the socket. The Patentee's accompanying remarks explained that since Feldman's pump body is the portion labeled "2", which Feldman calls an inflator housing, and this portion is not wholly or partially located in the valve 52, it does not render the amended claims unpatentable (Amendment dated July 11, 2003): . . . only the adapter 38 (i.e. air outlet) will be located in the valve 52 (i.e. socket) after insertion, and the inflator housing 2 (i.e. pump body) will be located outside the valve." See November 24, 2008 Response, pp. 5-6.

16. Also during reexamination of the '469 patent, the patent examiner rejected claims 14 and 16 in view of Chaffee 6,237,653. The examiner cited ". . . a socket (28) built in the inflatable body; an electric pump (100), including a pump body (1) and an air outlet (#18

and col. 7, lines 11-12), _ _." See June 24, 2008 rejection, p. 4. See also Fig. 5 of Chaffee, which is reproduced below. In its response, TWW reiterated the point that "_ _ the electric pump has at least two *different* features. One is the pump body. Another is the air outlet." See November 24, 2008 Response, pp 3-4. Thus, the distinction is made that the pump body and air outlet are different items. There is further evidence that the term "housing" and "pump body" are used interchangeably, or at the very least that the term "pump body" includes the housing, from observing that the Chafee patent 6,237,653 identifies item (1) as a housing (ref. col. 3, line 33), and also the patent examiner's reference to "a pump body (1)" in Chaffee. See June 24, 2008 rejection, p. 4. TWW did not dispute that the pump body is a housing.

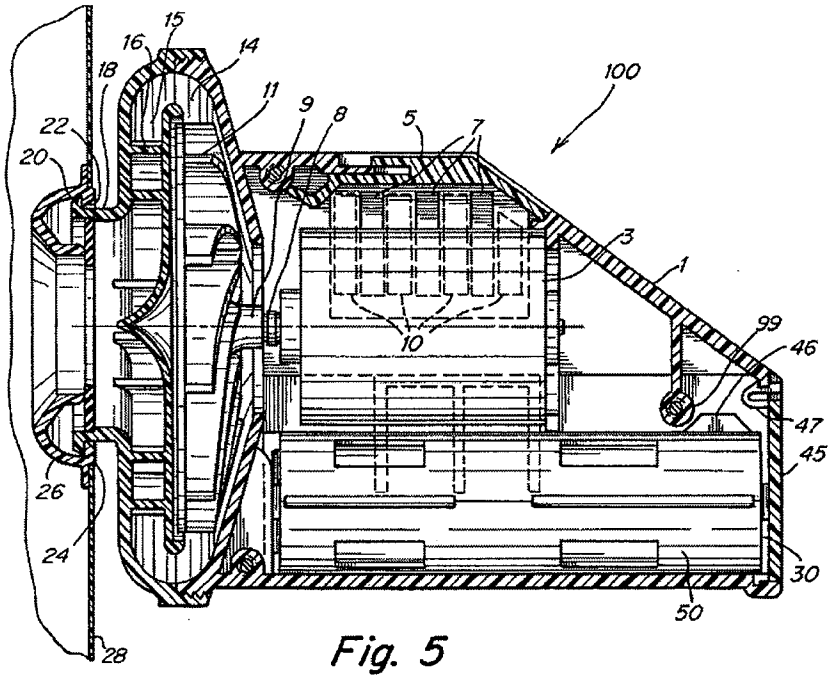


Fig. 5

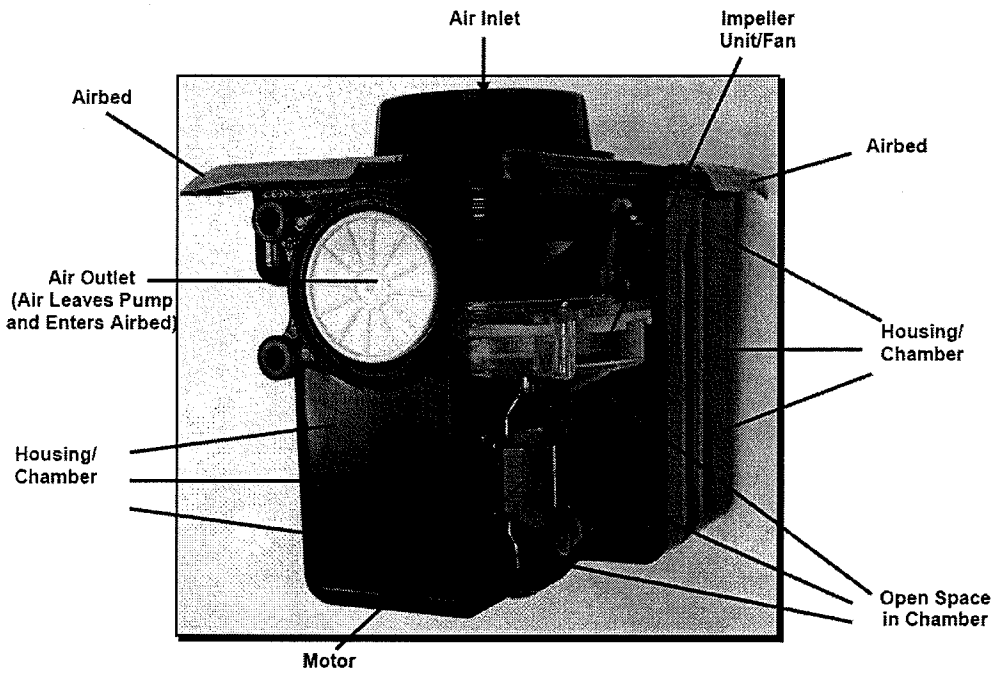
Fig. 5 from Chaffee 6,237,653

17. Application U.S. App. No. 10/647,814 ("the '814 application") is a continuation of the '469 patent. The specification and claims of the '814 application are similar to those of

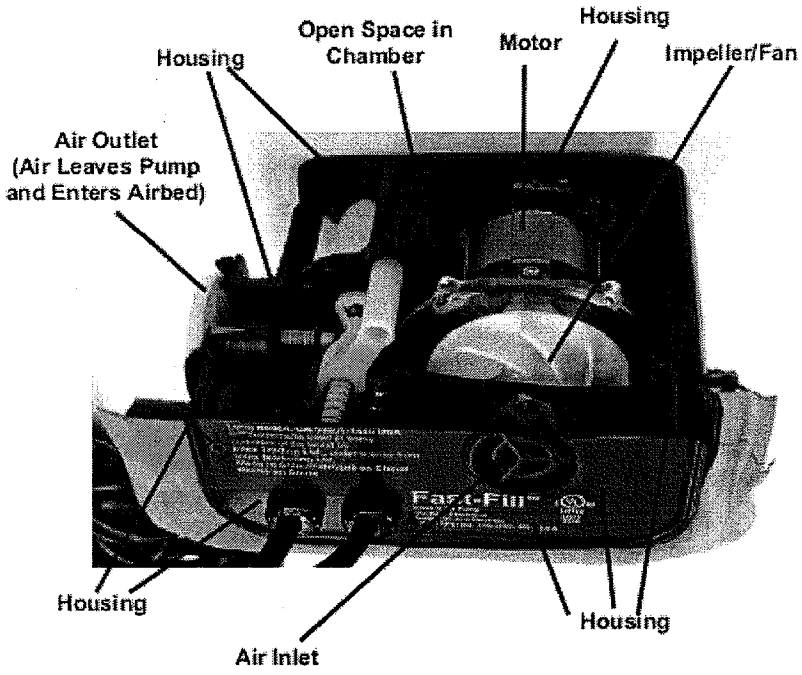
the '469 patent. During prosecution of the '814 application, TWW states that the "pump body is one element of an electric pump. . . . this element refers to a body that contains a pump." May 10, 2005 Response, p. 6. Thus, TWW concludes that a pump body is a body that contains a pump. This is also consistent with the descriptions given above for Feldman and Chaffee.

18. Therefore, in consideration of paragraphs 14 to 17 above, a person of ordinary skill in the art would conclude that the main part of the pump includes the housing that includes the other parts of the pump.

19. The main part of the pump in both Intex designs includes the rectangular housing that includes the other parts of the pump. This is shown in the following two figures of the Intex products. Design 1 is Intex Model AP619 with characteristics of inflation and full deflation. Design 2 is Intex Model AP619RW with characteristics of inflation and only deflation adjustment.



View of the Intex Air Pump Design 1



View of the Intex Air Pump Design 2

20. According to claims 14 and 16 of the '469 patent, the socket must be built into the inflatable body, and the electric pump must be connected to the socket. In addition, the pump body must be wholly or partially located in the socket. Since the terms "socket" and "pump body" are used separately in the claim, they refer to two different and separate features that cannot both be present in the same part.

21. The electric pump in the Intex designs includes the housing (pump body), the air outlet, and all the other parts that raise, compress, or transfer fluids, including gasses. Considering construction of the Intex design, the main part of the pump (the pump body) is attached directly to the inflatable body. This is shown in the two sketches above where the inflatable body is joined to the pump body.

22. The Intex designs do not have a socket. This is because the pump body is attached directly to the inflatable body. Thus, the Intex designs do not include any of the socket

limitations. For example, the Intex designs do not have a pump body that is wholly or partially located in any socket.

23. Since the pump body is connected directly to the inflatable body without a socket, the Intex design does not literally infringe claims 14-17 of the '469 patent.

24. The Intex designs also do not infringe claims 14-17 of the '469 patent under the doctrine of equivalents for the following reasons:

    a. I considered the function, way and result of the claimed socket element of the '469 patent, and the function, way and result of the cited Intex products.

    b. Intex's products do not have a structure that performs the function of a socket in accordance with the Court's claim construction (i.e. "an opening or hollow that forms a holder for something").

    c. My understanding is that TWW contends that Inex's pump housing is the claimed "socket." Intex's pump housing, however, corresponds to the claimed "pump body," not the socket. As discussed above, because TWW amended claims 14 and 16 to require that the pump body be located in a socket, the pump body cannot be the socket. Therefore, the pump body cannot be the equivalent of the socket because if that were true the pump body element in the claim would be negated.

    d. During prosecution of the patent, TWW by amendments and arguments discussed above, specified that there must be a separate pump body and a socket, thereby surrendering any argument that the pump body and socket are not two different structures. Any argument TWW makes regarding infringement under the doctrine of equivalents using the Court's Claim Construction has to ignore these

amendments and arguments. This is because the Intex designs do not have a separate housing and socket, and a socket in which the housing is located.

IV. Non-Infringement using Intex proposed claim construction

25. Intex had proposed definitions for "socket" and "pump body" for consideration by the Court in its Claim Construction. Although the proposals were not granted, I examined them to determine what consequences might occur if they were used instead of the ones accepted in the Memorandum Opinion and Order. The proposed terms are:

    a. Socket –a structure that fits and holds onto an inserted part so that the structure and the part are detachably connected to each other.

    b. Pump body - "a housing that surrounds the other components of the pump" or "the main part of the electric pump, including the housing, and to be a separate and distinct element from the air outlet."

26. In reviewing the issues discussed for the Intex products in Section III above, it is my opinion that there is no difference in the conclusion that Intex products do not infringe claims 14-17 of the '469 patent (i.e., because the Intex designs do not include a socket, even under Intex's proposed definition of this term).

27. Under Dr. Dubowsky's proposal that the Intex housing is a candidate for a socket (with which I disagree), the Intex designs still would not literally infringe claims 14-17 of the '469 patent under the Intex proposed definition of a socket. This is because the housing (or socket, according to Dr. Dubowsky) is not a structure that fits and holds onto an inserted part (e.g. the electric pump) so that the structure and the part are detachably connected to each other. In this case, "fit and hold" and "detachably connected" mean

that tools are not required for detachment, analogous to the TWW electric pump being detachable by hand.

28. For reason discussed above in paragraph 24, it is also my opinion that the Intex designs do not infringe claims 14-17 of the '469 patent under the doctrine of equivalents.

29. Additionally, even if Dr. Dubowsky's proposal that the Intex housing is a candidate for a socket (with which I disagree), the Intex designs still would not infringe claims 14-17 of the '469 patent under the doctrine of equivalents, for the following reasons:

    a. I considered the function, way and result of the claimed socket element of the '469 patent, and the function, way, and result of the cited Intex products. Intex's products do not have a structure that performs the function of a socket in the same way to achieve the same result as the '469 patent in view of Intex's proposed claim construction (i.e. Intex's products do not have a structure that fits and holds onto an inserted part (e.g., the electric pump) so that the structure and the part are detachably connected to each other). And this is true even if Dr. Dubowsky's proposal is accepted.

    b. Specifically, the housing of the Intex products, as identified by Dr. Dubowsky, is not designed to fit and hold onto any parts in a detachable manner as the detachability function is described by TWW in the '469 Patent. For instance, the electric pump must be connected to (i.e., coupled or joined to) the socket, and thus the socket must be configured to fit and hold onto the electric pump. And when discussing the socket embodiments, TWW describes an inflatable product where: (i) during operation, the user detaches the electric pump (Col. 3, ll. 4-5); (ii) the electric pump 30 is detachable from the socket (Col. 3, ll. 42-43); and (iii) the

electric pump is "fitted in reverse" (Col. 4, ll. 61-62) or "reversely disposed" (Col. 5, ll. 52-53) during the deflation operation. A person of ordinary skill therefore understands that the electric pump must be configured such that, once it is attached to the housing, a user can easily detach the electric pump during use of the inflatable product (i.e., without the use of tools). Even if Dr. Dubowsky's proposal that the Intex housing is a socket is accepted (again, a proposal with which I disagree), this housing does not perform the function of fitting and holding onto an inserted part in the same way as the claims 14-17, i.e., in a manner that allows a user to detach the inserted part (e.g., the electric pump) during operation without tools.

c. Furthermore, TWW's use of the terms "socket" and "chamber/housing" show that the Intex housing is not equivalent to the claimed socket. The '469 patent has 10 embodiments. Embodiments 1-7 use the term "socket," while embodiments 8-10 use the words "chamber" and "housing." During prosecution, TWW was required to elect certain claims to continue prosecuting because the examiner viewed the '331 application as disclosing more than one invention. In its December 11, 2002 response to the examiner, TWW chose to pursue the socket embodiments and not the chamber/housing embodiments, as shown by claims 14-17 (and all the other claims of the '469 patent) requiring a "socket." Therefore, since chambers and housings that contain an electric pump are a different invention from those that use a socket, and because TWW elected to pursue the socket embodiments, TWW cannot argue that Intex's products include a chamber and that the chamber performs the same function of fitting and holding onto an inserted part or achieves

the same result of allowing the user to detach the pump from the socket. Socket embodiments all fit and hold the pump in a detachable manner whereas the chamber/housing embodiments contain the pump in a more permanent manner.

V. Analysis of Competitive Air Mattresses

30. I have been asked to offer opinions on whether the following products (all of which are referenced in Dr. Dubowksy's June 19, 2006 report) might infringe claims 14 to 17 of the '469 patent, based on the Court's Claim Construction and also on Intex's proposed definitions of socket and pump body:

    a. Coleman Deluxe Raised Pillowtop, model 5998-690 (or 5998-691) (this bed and its parts have been marked with Bates Numbers IRC-PS-000003 A – G)

    b. Aerobed Premium Memory Foam (this bed and its parts have been marked with Bates Numbers IRC-PS-000002 A – F)

    c. Magellan Queen Size, model HY-AL001-D (this bed and its parts have been marked with Bates Numbers IRC-PS-000001 A – F)

31. Under the definitions of "socket", "pump body", and "electrical pump" provided in the Courts Claim Construction, the Coleman Deluxe Raised Pillowtop ("Coleman Deluxe") does not literally infringe claims 14 to 17 of the '469 patent because it has an electric pump whose pump body is connected directly to the inflatable body without the use of a socket.

32. There is no difference in this opinion if the Intex proposed definitions for "socket" and "pump body" are used because the conclusion that there is no socket remains the same.

33. Under the definitions of "socket", "pump body", and "electrical pump" provided in the Courts Claim Construction, the Aerobed Premium Memory Foam does not literally infringe clauses 14 to 17 of the '469 patent because it has an electrical pump whose pump body is connected directly to the inflatable body without the use of a socket.

34. There is no difference in this opinion if the Intex proposed definitions for "socket" and "pump body" are used because the conclusion that there is no socket remains the same.

35. Under the Courts Claim Construction, the Magellan Queen Size, model HY-AL001-D literally infringes claims 14 to 17 of the '469 patent. Under claim 14, the Magellan has all of the claim limitations. For example, it has a socket built in the inflatable body, a pump body wholly located in the socket, and there is a connector for connecting an external power. The electrical connector is attached to the electric pump. Under claim 16, the same conditions exist as described for claim 14 except claim 16 does not require a connector; however, the Magellan electrical pump is also "geometrically" matched with the socket to prevent an air leakage therebetween.

36. There is no difference in this opinion if the Intex proposed definitions for "socket" and "pump body" are used.

VI. TWW's products

37. I looked at two TWW products in view of the Court's Claim Construction: (1) the the Hillary Insta-Bed, Model 72940 Queen size (TWW 900000); and (2) the Insta-Bed, Pillow top airbed with built-in pump, Queen size (TWW 900002). Similar to the Magellan, these TWW products include a separate pump having a pump body and socket where the pump body is located in the socket.

January 25, 2011

John F. Berninger

John F. Berninger