

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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AMERICAN NATIONAL MANUFACTURING INC,  
Petitioner,

v.

SLEEP NUMBER CORPORATION  
f/k/a SELECT COMFORT CORPORATION,  
Patent Owner.

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Case IPR2019-00500  
Patent 9,737,154 B2

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Before SCOTT A. DANIELS, FRANCES L. IPPOLITO, and  
ALYSSA A. FINAMORE, *Administrative Patent Judges*.

DANIELS, *Administrative Patent Judge*.

DECISION  
Institution of *Inter Partes* Review  
35 U.S.C. § 314(a)

## I. INTRODUCTION

### A. Background

American National Manufacturing, Inc., (“ANM”) filed a Petition to institute an *inter partes* review of claims 1–19 of U.S. Patent No. 9,737,154 B2 (“the ’154 patent”). Paper 1 (“Pet.”). Sleep Number Corporation, (“Sleep Number”) filed a Preliminary Response.<sup>1</sup> Paper 6 (“Prelim. Resp.”). Pursuant to our Order entered March 26, 2019, we authorized ANM to file a Reply to the Preliminary Response (Paper 7) addressing issues relating to service of process raised in Sleep Number’s Preliminary Response. Paper 5.

We have jurisdiction under 35 U.S.C. § 314. Under § 314, an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). The Board determines whether to institute a trial on behalf of the Director. 37 C.F.R. § 42.4(a). If an *inter partes* review is instituted, a final written decision under 35 U.S.C. § 318(a) must decide the patentability of all claims challenged in the petition. *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1353 (2018).

Upon considering the Petition, Preliminary Response, and Reply as well as the evidence of record, we determine that ANM has shown a reasonable likelihood that it would prevail with respect to at least one of the

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<sup>1</sup> Articles of Amendment were recorded for the ’154 patent with the USPTO Assignments Recordation Branch on November 15, 2017, at Reel/Frame number 044456/0132, indicating a change of corporate name from, Select Comfort Corporation, to Sleep Number Corporation. Ex. 3001. The parties shall use the case caption provided on the front page of this Decision in all further briefing and communications in this proceeding.

IPR2019-00500

Patent 9,737,154 B2

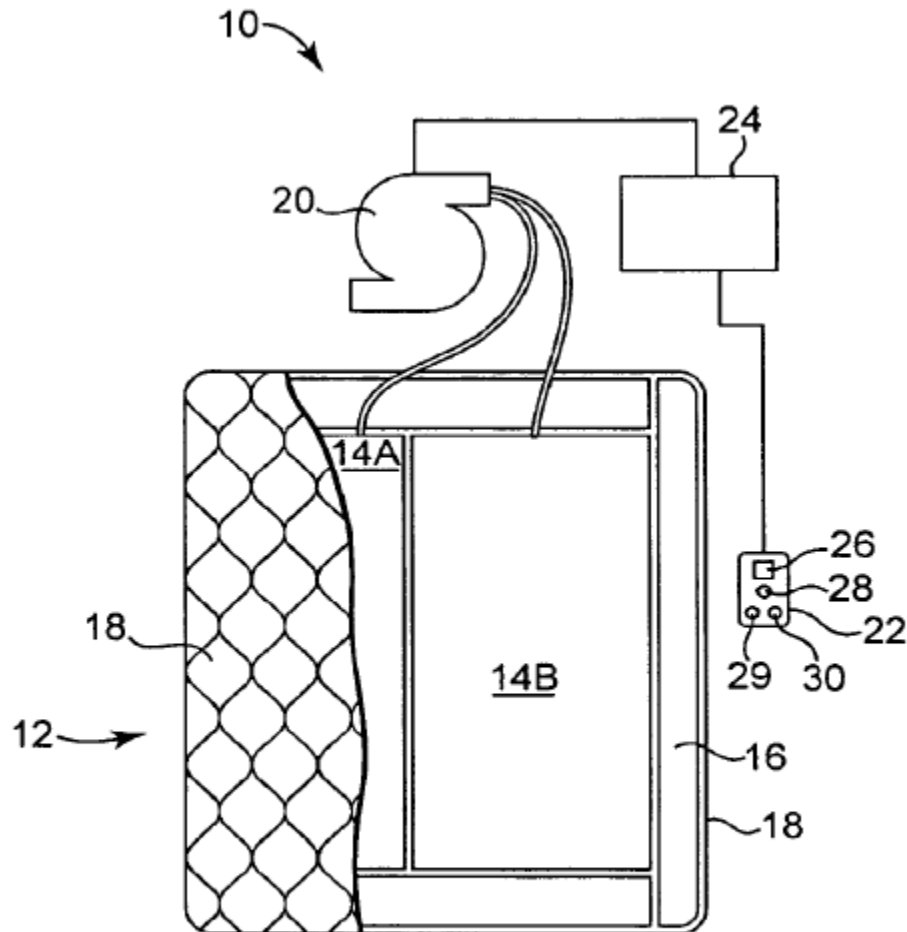
challenged claims. Accordingly, we institute an *inter partes* review of all the challenged claims, on all asserted grounds as set out in the Order included with this Decision.

*B. Additional Proceedings*

ANM states that the '154 patent is asserted by Sleep Number in Case No. 5:18-cv-0356-AB (SPx) and Case No. 5:18-cv-0357-AB (SPx) against ANM in the United States District Court for the Central District of California. Pet. 1. Sleep Number informs us that the district court cases are currently stayed. Paper 4, 3. ANM has also filed another petition contesting certain claims in related U.S. Patent No. 8,769,747 B2 in IPR2019-00497. *Id.* at 2.

*C. The '154 Patent*

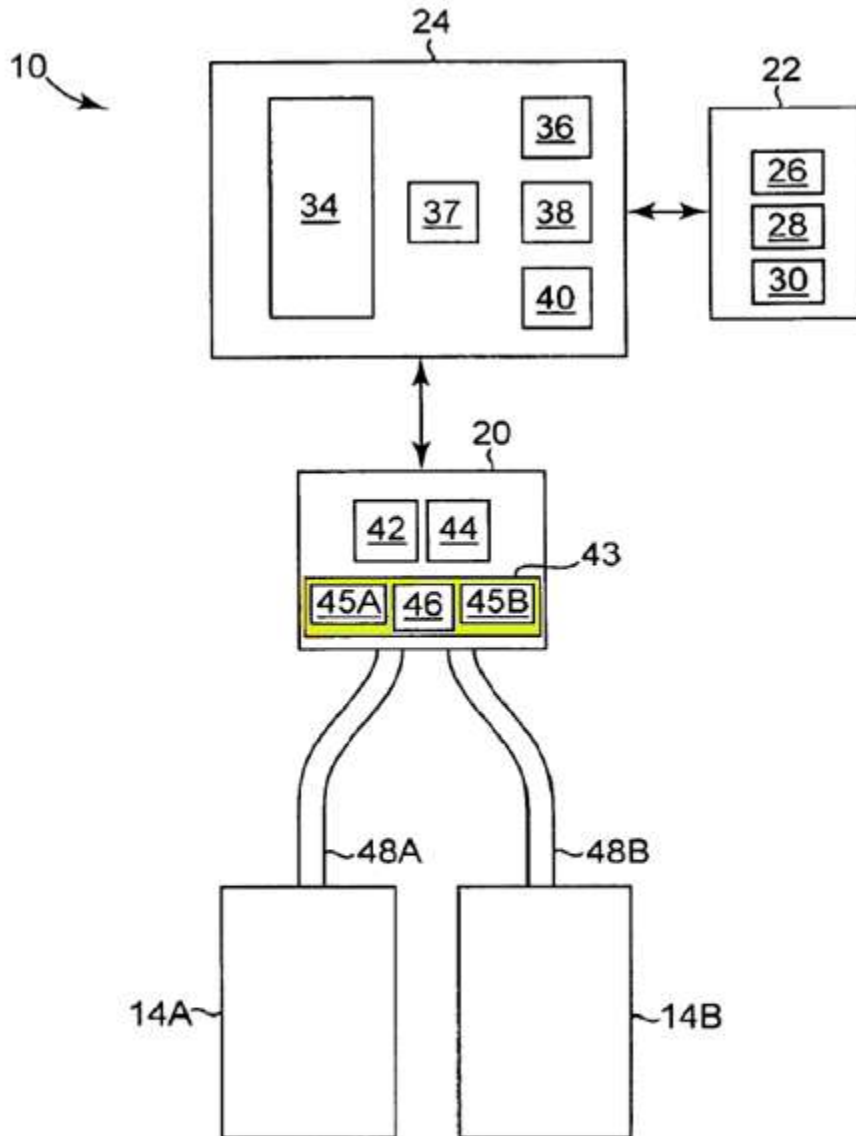
The '154 patent (Ex. 1001), titled “System and Method for Improved Pressure Adjustment,” relates generally to improving the air pump system response time, effectiveness and accuracy of inflating and deflating air chambers, or bladders, of an air bed for example. Ex. 1001, (57) Abstract. The '154 patent explains that a problem with air beds is “the amount of time and the number of adjustment iterations necessary to achieve a desired pressure in an air bladder,” as well as “accuracy of the actual bladder pressure.” *Id.* at 2:19–22. Figure 1 of the '154 patent showing air bed system 10 is reproduced below.



**Fig. 1**

Figure 1 of the '154 patent, above, illustrates air bed system 10 including bed 12 having separate air chambers 14A, 14B. *Id.* at 3:29–31. Pump 20 is in fluid communication with the air chambers and the pump is controlled by control box 24 via a wired or wireless user control 22. *Id.* at 31–38.

Annotated Figure 2 of the '154 patent is reproduced below.



**Fig. 2**

Figure 2 of the '154 patent, as annotated by the Board, illustrates in a block diagram various components of air bed system 10, including, *inter alia*, pump 20 encompassing motor 42 and pump manifold 43—highlighted in yellow, having control valves 45A, 45B and pressure transducer 46. *Id.* at 3:51–64. Communicating with pump 20, control box 24 includes microprocessor 36 for receiving pressure readings from transducer 46 and controlling pump motor 42 based on input commands from user control 22.

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