

(12) **United States Patent**  
**Nunn et al.**

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(54) **INFLATABLE AIR MATTRESS SYSTEM WITH DETECTION TECHNIQUES**

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(71) Applicants: **Select Comfort Corporation**, Minneapolis, MN (US); **BAM Labs, Inc.**, Campbell, CA (US)

(58) **Field of Classification Search**  
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(72) Inventors: **Rob Nunn**, Eden Prairie, MN (US); **Wade Daniel Palashewski**, Andover, MN (US); **Matthew Wayne Tilstra**, Rogers, MN (US); **Steven Young**, Campbell, CA (US); **Carl Hewitt**, Campbell, CA (US); **Yuri Zhovnirovsky**, Campbell, CA (US)

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*Primary Examiner* — Fredrick Conley

(74) *Attorney, Agent, or Firm* — Fish & Richardson P.C.

(57) **ABSTRACT**

In one example, this disclosure describes a method including receiving, at a central controller of an air mattress system, a plurality of air pressure value, determining a plurality of average values using the plurality of the received air pressure values, calculating a difference value between a first one of the plurality of average values and a second one of the plurality of average values, comparing the difference value to a threshold value, determining, based on the comparison, whether a user of the air mattress system moved.

**15 Claims, 7 Drawing Sheets**

(73) Assignees: **Select Comfort Corporation**, Minneapolis, MN (US); **SleepIQ Labs Inc.**, San Jose, CA (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 77 days.

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