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Petty

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(54) **FAN BLADE TIP CLEARANCE CONTROL VIA Z-BANDS**

(75) Inventor: **Dale William Petty**, Wallingford, CT (US)

(73) Assignee: **United Technologies Corporation**, Hartford, CT (US)

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CPC ***F01D 11/08*** (2013.01); ***F01D 11/005*** (2013.01); ***F01D 11/18*** (2013.01)
USPC **415/1**

(58) **Field of Classification Search**
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See application file for complete search history.

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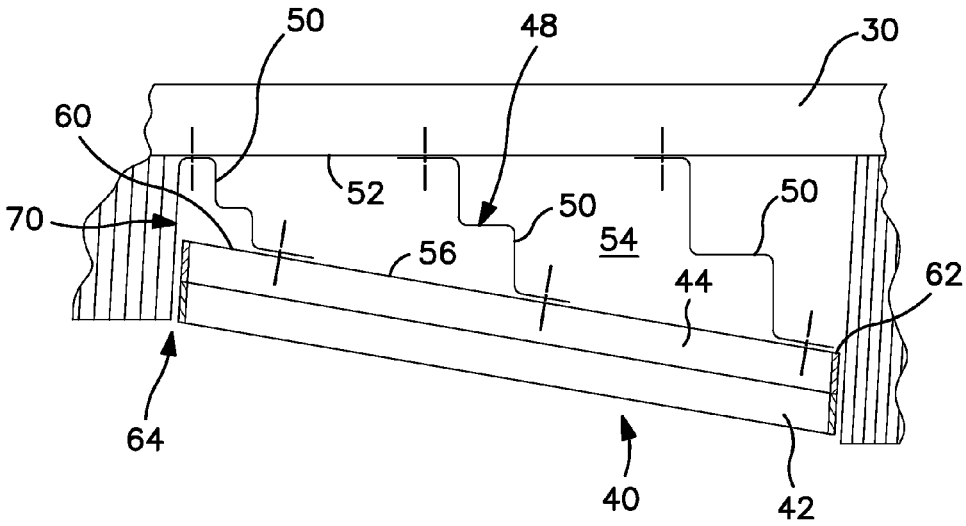
Primary Examiner — Edward Look
Assistant Examiner — Aaron R Eastman
(74) *Attorney, Agent, or Firm* — Bachman & LaPointe, P.C.

(57) **ABSTRACT**

An engine has a blade, a casing surrounding the blade, an seal ring, and a passive system for connecting the seal ring to the casing and for accommodating thermal expansion of the seal ring relative to the casing so as to maintain blade tip clearance control. The passive system may include at least one, metallic Z-band extending between the casing and the seal ring.

20 Claims, 1 Drawing Sheet