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(54) **METHOD OF DESIGNING A SOUND WAVEGUIDE SURFACE**

(75) Inventors: **Anthony Charles Zander**, North Adelaide (AU); **David John Murphy**, Henley Beach (AU); **Richard Christie Morgans**, Kilburn (AU); **Colin Henry Hansen**, Marion (AU)

(73) Assignee: **Krix Loudspeakers Pty Ltd**, Hackham, South Australia (AU)

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(51) **Int. Cl.**

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(58) **Field of Classification Search**

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See application file for complete search history.

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*Primary Examiner* — Omar Fernandez Rivas

*Assistant Examiner* — Angel Calle

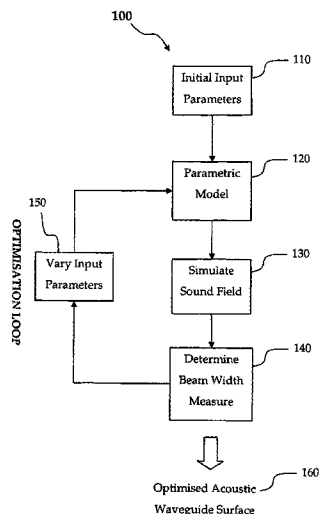
(74) *Attorney, Agent, or Firm* — Klauber & Jackson LLC

(57)

**ABSTRACT**

A method for designing a sound waveguide surface is described. The method includes the steps of forming a parametric model of the sound waveguide surface where the parametric model has at least one input parameter and then simulating a sound field that is formed by the sound waveguide surface. A frequency dependent spatial distribution measure is then determined for the sound field associated with the sound waveguide surface and the at least one input parameter is varied to change the sound waveguide surface to adjust the value of the frequency dependent spatial distribution measure.

**20 Claims, 7 Drawing Sheets**



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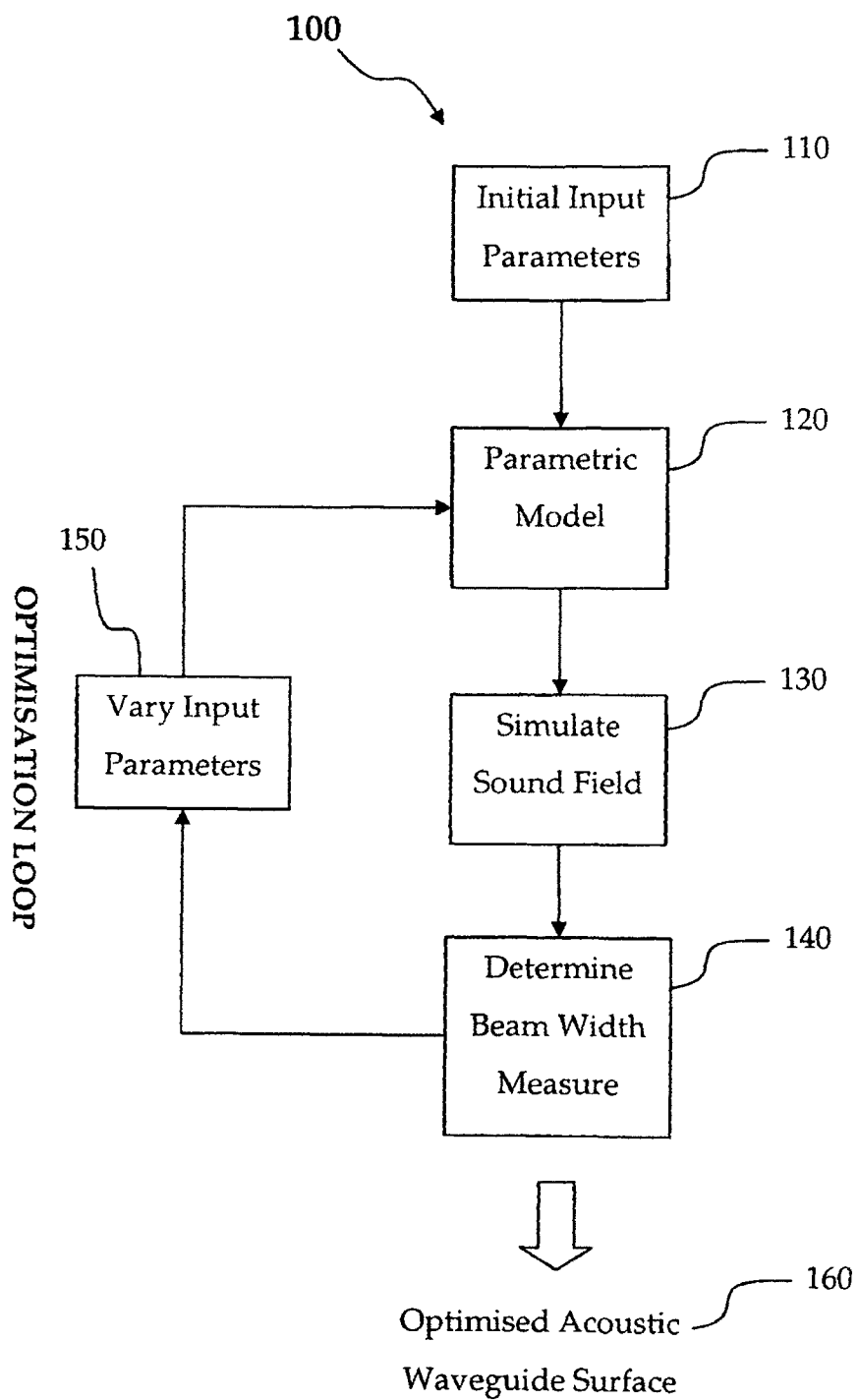
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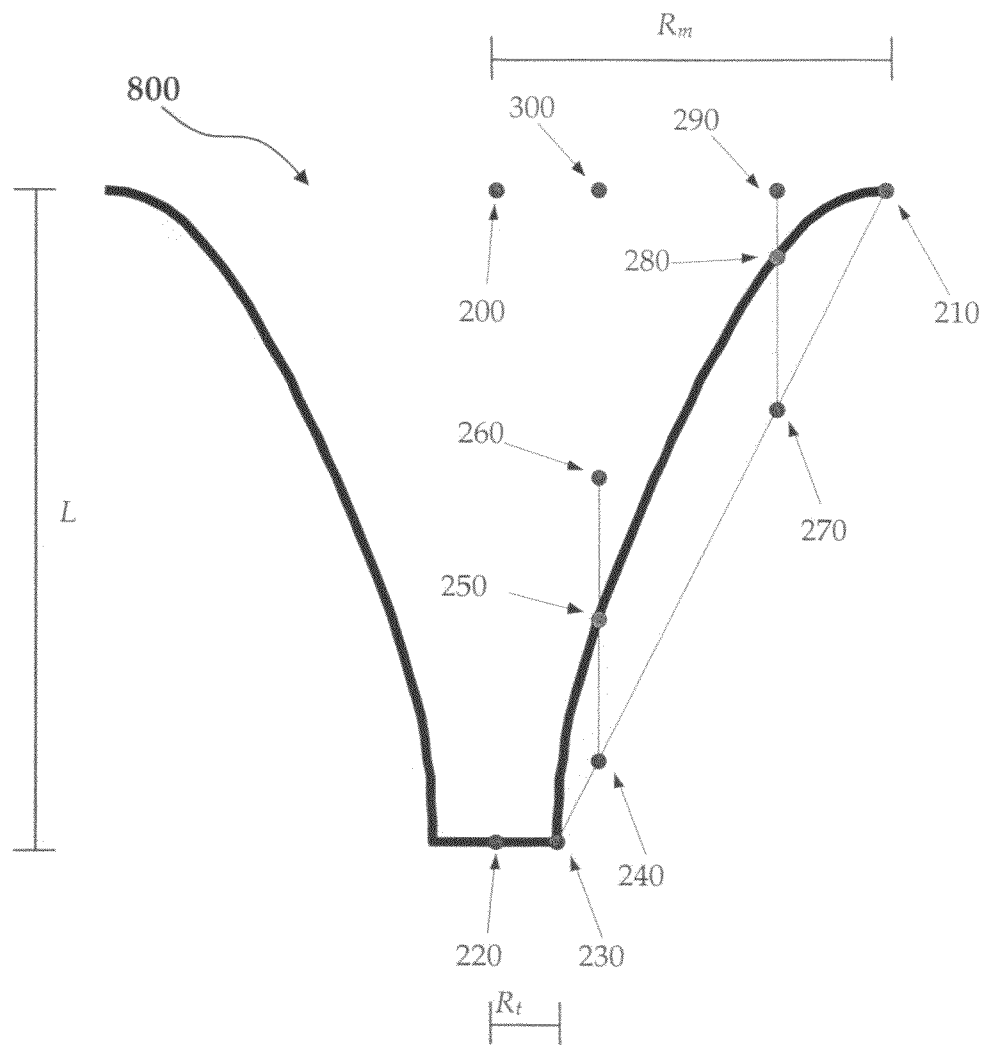
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**Figure 1**

**Figure 2**