



(12) **United States Patent**
Kim pian

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(54) **POWER STEERING SYSTEM
INCORPORATING DOUBLE WAVE SPRING
WITH INSULATING INTERMEDIATE LAYER**

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F16H 2025/2445 (2013.01)

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(58) **Field of Classification Search**
CPC B62D 5/0448; F16C 25/083
See application file for complete search history.

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(57) **ABSTRACT**

(30) **Foreign Application Priority Data**

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The invention relates to a power steering system, in particular
for a motor vehicle, comprising a servomotor which drives an
axially movable component via a nut mounted in a bearing in
a rotatable manner in a frame. The nut is engaged with a
threaded spindle formed on the component and is supported
axially by the bearing in an elastic manner relative to the
frame by means of elastic elements and radially on the frame
along a narrow circumferential contact surface. Each wave
spring assembly has at least two elements, at least one element
of which is a wave spring, and an elastic intermediate
layer is arranged between each of the at least two elements.

(51) **Int. Cl.**

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(Continued)

(52) **U.S. Cl.**

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(2013.01); **F16C 19/06** (2013.01); **F16C**

11 Claims, 3 Drawing Sheets

