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(12) **United States Patent**
Lim

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(54) **REGULATOR FOR THE CONTROLS THE TIMBRE AND THE VOLUME OF FLUTE SOUND**

(76) Inventor: **Jae-Dong Lim**, 4F Hyosung B/D, 1695-7, Seocho-4dong, Seocho-ku, Seoul 137-074 (KR)

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(58) **Field of Search** **84/384, 386, 380 R, 84/382, 383 R**

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Primary Examiner—Shih-Yung Hsieh

(74) *Attorney, Agent, or Firm*—Shinju Global IP Counselors, LLP

(57) **ABSTRACT**

This invention is of a mechanism which controls the timbre and the volume of flute sound. More concrete explanation of the device is as follows. This device enables the players to control the various color and the volume of the sound and perform with unique tone regardless to what material each flute is made up of. A blocking piece is positioned behind the cork of the head joint which forms a flute along with the body and the foot joint, and a connecting piece is installed on the control cap in a spiral assembly. The oscillation wave caused by the air pressure inserted through the mouthpiece of the head joint goes through the cork and is transferred to the blocking piece and the connecting piece with different weights reflecting some part of the wave and absolving the other at the same time. Thus this wave will change into different oscillating waves which makes the variety of tone color and volume possible, the most characteristic point this mechanism serves for.

18 Claims, 2 Drawing Sheets

