

[54] **ELECTRIC GUITAR WITH SLIDABLE PICKUP BENEATH STRINGS**

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[51] Int. Cl.<sup>2</sup> ..... G10H 3/00

[58] Field of Search ..... 84/1.04, 1.14–1.16, 84/267, 453, DIG. 24

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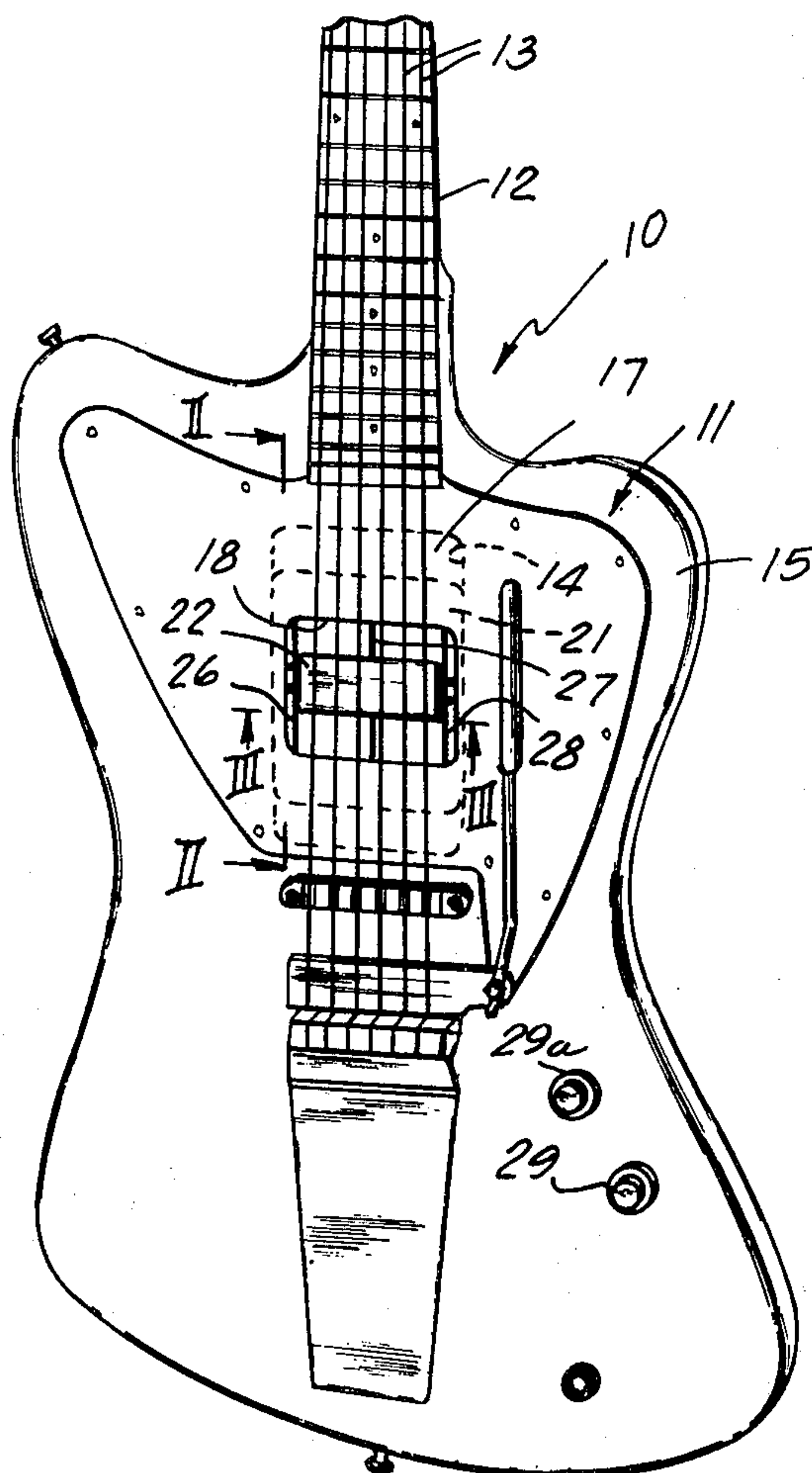
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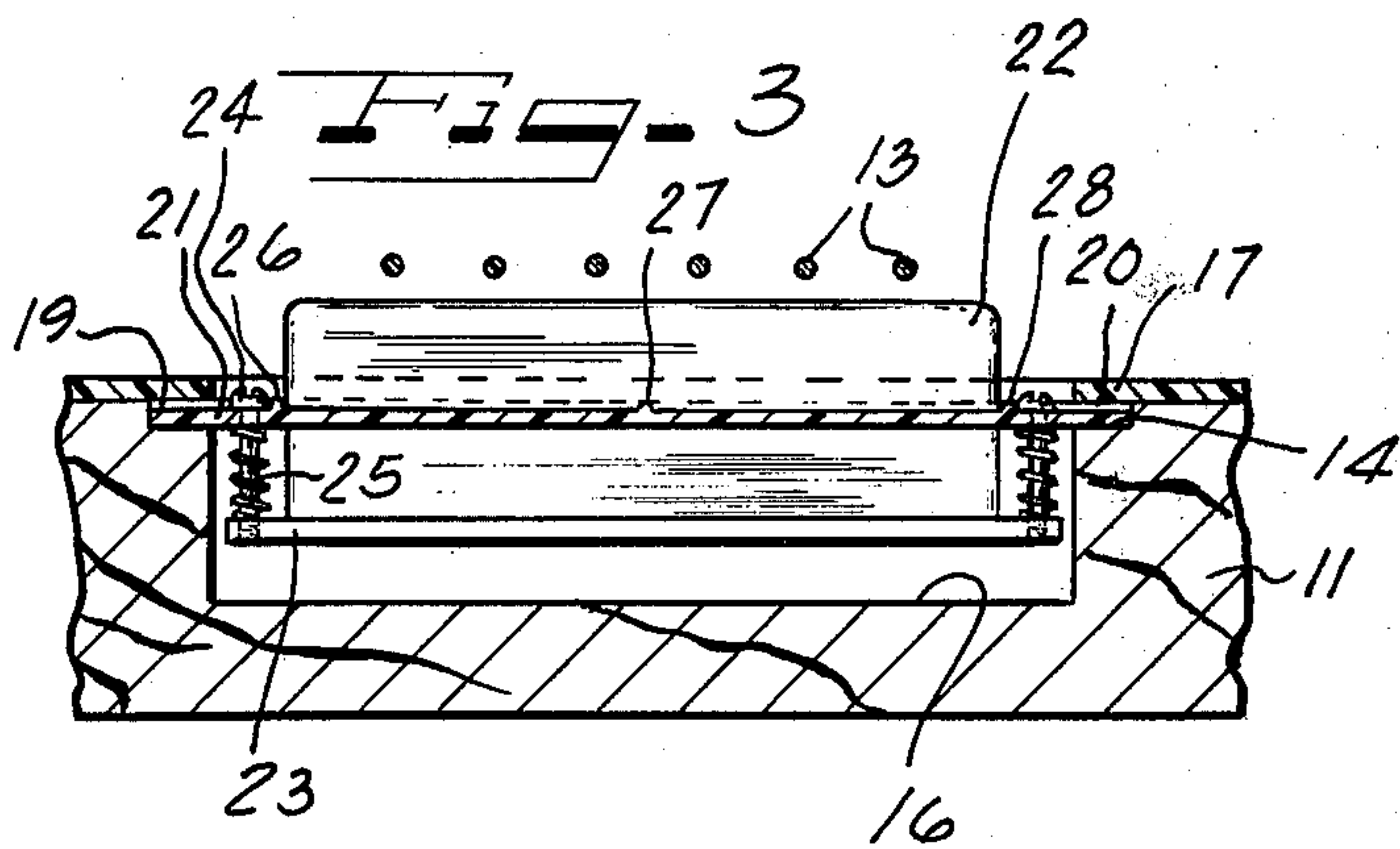
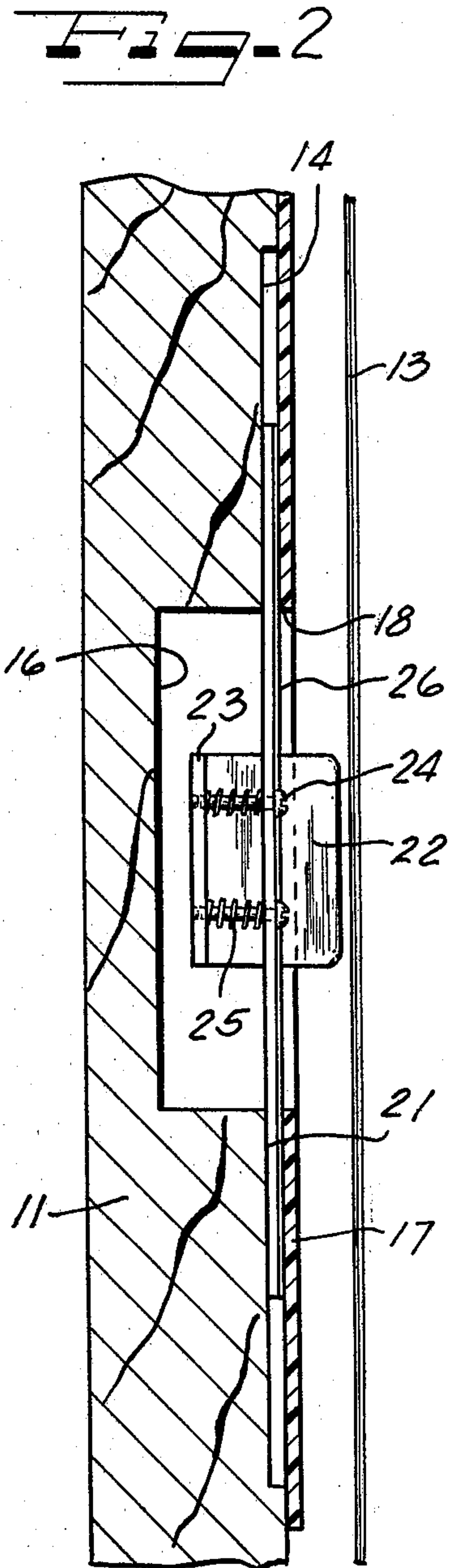
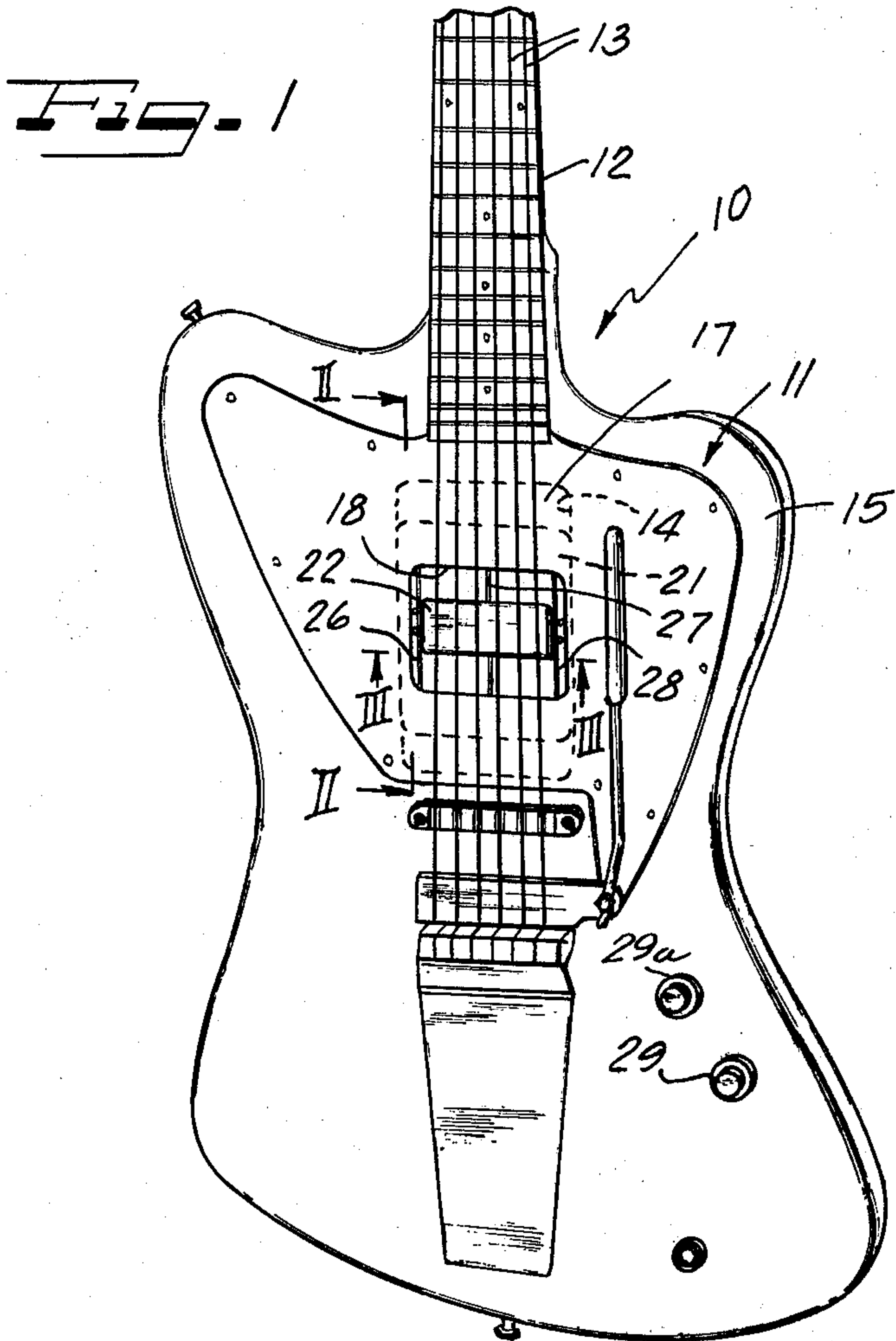
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[57] **ABSTRACT**

An electric guitar includes an electric pickup supported by a slide member beneath the strings, the slide member being guided from within the guitar for movement in a plane substantially parallel to that of the strings so that the pickup location and hence the tonality can be altered during playing thereof.

**11 Claims, 3 Drawing Figures**







# ELECTRIC GUITAR WITH SLIDABLE PICKUP BENEATH STRINGS

## BACKGROUND OF THE INVENTION

### 1. Field of the Invention

This invention relates to an electric guitar having means by which the position of its electric pickup can be adjusted.

### 2. Prior Art

It has been known heretofore to mount a pickup on a guitar in such a manner that its location can be altered. Such arrangements have not always included a capability of pickup adjustment during playing of the instrument and/or have been characterized by external mounting structure that adversely affects the appearance of the instrument.

## SUMMARY OF THE INVENTION

The invention includes an electric guitar with strings mounted over a body, a slide member having an electrical pickup secured thereto disposed within the body and trapped in a manner enabling selective positioning of the pickup along the length of the strings.

Accordingly, an important object of the present invention is to overcome the disadvantages, deficiencies and problems referred above as existing in the prior art.

Another object of the present invention is to provide a new and improved means for movably mounting an electric pickup.

A further object of the present invention is to provide means for movably mounting an electric pickup which is devoid of support structure which, if present, would adversely affect the aesthetic appearance of the device.

Many other advantages, features and additional objects of the present invention will become manifest to those versed in the art upon making reference to the detailed description and the accompanying sheet of drawings in which a preferred structural embodiment incorporating the principles of the present invention is shown by way of illustrative example.

## ON THE DRAWING

FIG. 1 is a front elevational view of a guitar, in slight perspective, and partly broken away, provided in accordance with the invention;

FIG. 2 is an enlarged fragmentary cross sectional view taken substantially along the line II—II of FIG. 1; and

FIG. 3 is an enlarged fragmentary view taken along line III—III of FIG. 1.

## AS SHOWN ON THE DRAWING

As shown in FIG. 1, there is provided an electric guitar generally indicated by the numeral 10 which includes a body 11 to which is attached a neck 12 which support a set of strings 13. The guitar 10 illustrated is of the solid body type and the shape of the body disclosed is known in the art. The term "guitar" as used herein refers to all types of solid or hollow body guitars including bass guitars, and whether a guitar has four, six or twelve strings is immaterial for purposes of this invention.

The body 11 has a cavity 14 disposed at the upper surface 15 of the body 11, the cavity 14 having a further cutout portion 16 best seen in FIG. 2 and FIG. 3.

The cavity 14 and cutout portion 16 are to some extent covered by some type of means, the means here

comprising trapping means in the form of a pick guard 17 which overlies the cavity 14. The means, trapping means or pick guard 14 at least partially closes the cavity 17 and is secured to the body and is apertured as shown at 18 to provide an aperture which extends along the length of the strings 13. The portion of the pick guard 17 that overlies the cavity 14 defines with the body 11 a pair of U-shaped tracks 19, 20 shown in FIG. 3 within which there is disposed a slide member 21 which in this embodiment is generally rectangular and is of a length shorter than the cavity 14 so as to be movable along the direction of the length of the strings within the cavity 14; the slide member 21 is longer than the length of the cutout portion 16. In this embodiment, the length of the cutout portion 16 along the length of the strings 13 is substantially equal to the length of the aperture 18 in the same direction. Thus the cavity 14 receives and supports the slide member 21 which is trapped therein by the overlying portion of the pick guard 17 so as to be movable in a plane substantially parallel to that of the strings.

The slide member 21 is apertured and it receives and supports an electric pickup 22 of conventional construction. As shown in FIGS. 2 and 3, the pickup includes a mounting plate 23, and a number of screws 24 extend through the slide member 21 into threaded openings in the mounting plate 23, the slide member 21 and the mounting plate 23 being held apart by a number of springs 25. The pickup 22 thus projects through the slide member 21 toward the strings and also projects through the slide member 21 in a direction away from the strings, while the screws 24 enable adjustment of pickup position and parallelism with respect to the strings 13.

The slide member 21 is provided with a selected number of ribs 26-28. As the ribs 26-28 extend along the length of the slide member 21, they serve to stiffen the same, particularly at the pickup 22. In that the ribs project upwardly toward the pick guard 17, the ribs also protect the exposed or outer surface of the slide member 21 against becoming scratched as a consequence of the sliding movement.

With the guitar 10 held in playing position, just as the musician can during playing adjust various control knobs 29, 29a the musician can also grasp the projecting corners of the pickup 22 and slide the same to a selected position. As illustrated, the pickup 22 is in a central position, but the same can be moved toward the neck 12 or away from the neck 12 by an amount limited by the dimensions of the components to provide a means for selecting the point on the string which will be sensed electrically. Since strings vibrate with many harmonics, changing the position of the pickup 22 alters the harmonic content and hence the tonality or voicing of the guitar output, a feature which is musically desirable for variety.

This construction also has certain economic advantages. Heretofore, it has been customary to utilize two separate pickups to provide the musician with such a choice, but with this arrangement, only one pickup is needed. Further, it has been common heretofore to provide two control knobs 29, 29a for each pickup, namely a volume control and a tone control, and therefore by this arrangement, instead of having four knobs for a two-pickup guitar, only two knobs 29, 29a need to be provided, thereby eliminating not only the associated structure and wiring but also eliminating complex-



ity in playing because when the pickup 22 is moved, it normally may not be necessary to reset either of the knobs 29,29a. With a two-pickup guitar, it is necessary when changing from one pickup to the other in a conventional arrangement to turn one volume control to 0 and the other to a desired level and vice versa whereas here the change can be smoothly made, even while the strings are still vibrating.

Although various minor modifications may be suggested by those versed in the art, it should be understood that I wish to embody within the scope of the patent warranted hereon all such embodiments as reasonably and properly come within the scope of my contribution to the art.

I claim as my invention:

1. An electric guitar having strings, comprising:

a. a body having a cavity with a cutout portion therein over which the strings extend;

b. a slide member having a length and width exceeding that of said cutout portion, opposite edges of which are trapped in said cavity, said slide member being selectably movable in a direction parallel to that of the strings; and

c. an electric pickup secured to said slide member and having clearance with respect to said cutout portion and responsive to string vibrations;

whereby the guitar player may alter pickup location and hence tonality of the guitar during playing.

2. An electric guitar according to claim 1 in which said cavity is disposed at the surface of said body adjacent to the strings, and is of such depth as to receive said slide member, and a pick guard secured to said body and overlying said slide member in at least partially surrounding relation to the pickup and at least partially closing the cavity.

3. An electric guitar according to claim 1 in which said cavity is of greater length than said cutout portion in the direction of said strings.

4. An electric guitar according to claim 1 in which

said pickup extends through a single aperture in said slide member toward the strings.

5. An electric guitar according to claim 4 in which said pickup extends beyond said slide member in a direction away from said strings, said cutout portion receiving a portion of the pickup.

6. An electric guitar according to claim 1 including means secured to said body in overlying relation to said cavity, and jointly with said body defining a pair of confronting U-shaped tracks receiving and guiding opposite sides of said slide member.

7. An electric guitar according to claim 6 in which said means comprises a pick guard.

8. An electric guitar according to claim 1 in which said slide member has rib means projecting normally to the plane of movement for minimizing friction between said slide member and said body.

9. An electric guitar according to claim 8 in which said rib means project toward the strings for minimizing scratching of said slide member.

10. An electric guitar having strings, comprising:

a. a body over which the strings extend;

b. trapping means including a pick guard on said body in underlying relation to said strings, said pick guard having an apertured portion disposed directly beneath and extending along the length of said strings; and

c. a slide member having an electrical pickup secured thereto, and disposed beneath and engageable with said pick guard, said pickup extending into said apertured portion of said pick guard, said slide member with said pickup being selectably movable in a direction parallel to said strings.

11. An electric guitar according to claim 10 including means movably mounting said pickup on said slide member for adjustment of the entire pickup toward and away from said strings.

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