Aug. 13, 1968 B. G. DYCUS 3,396,621

INTERCHANGEABLE NECK ASSEMBLIES FOR ELECTRICAL MUSICAL INSTRUMENTS

Filed Oct. 8, 1965 2 Sheets-Sheet 1

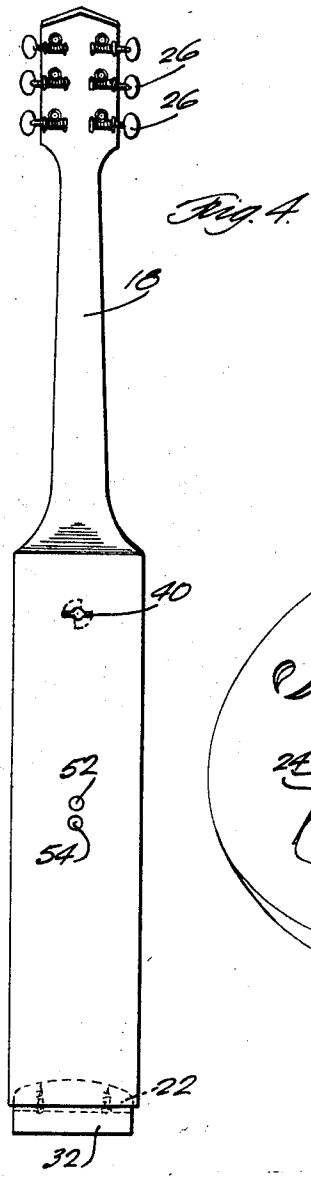


Fig. 4.

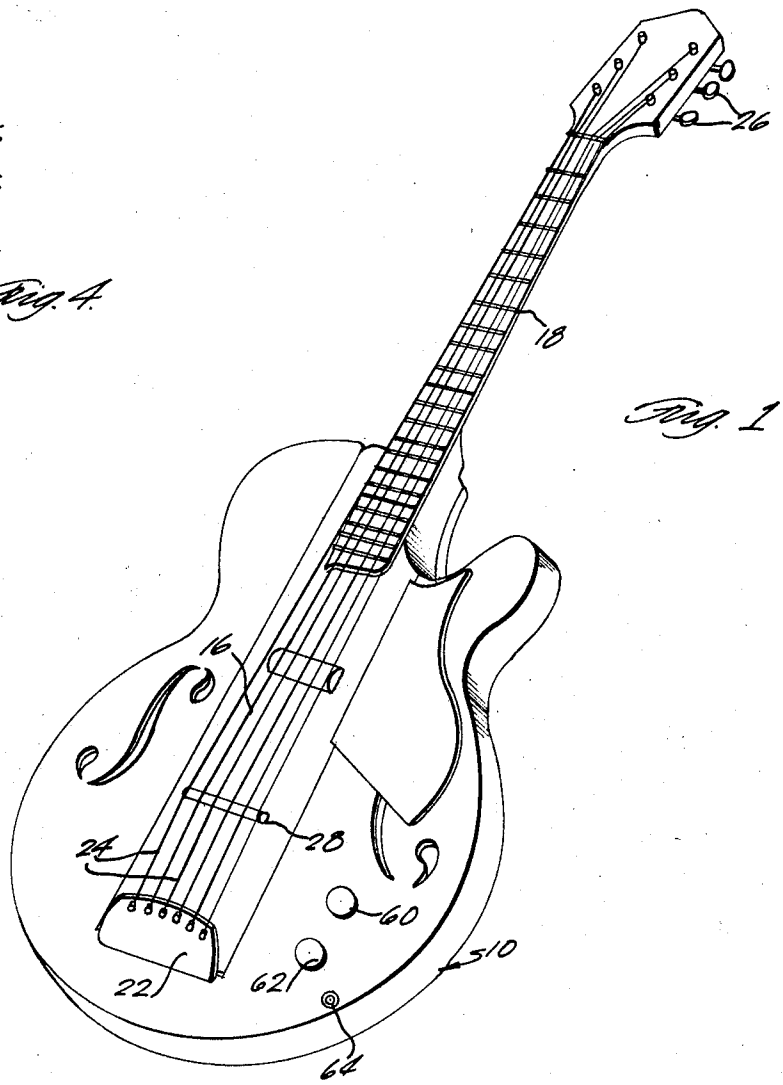


Fig. 1

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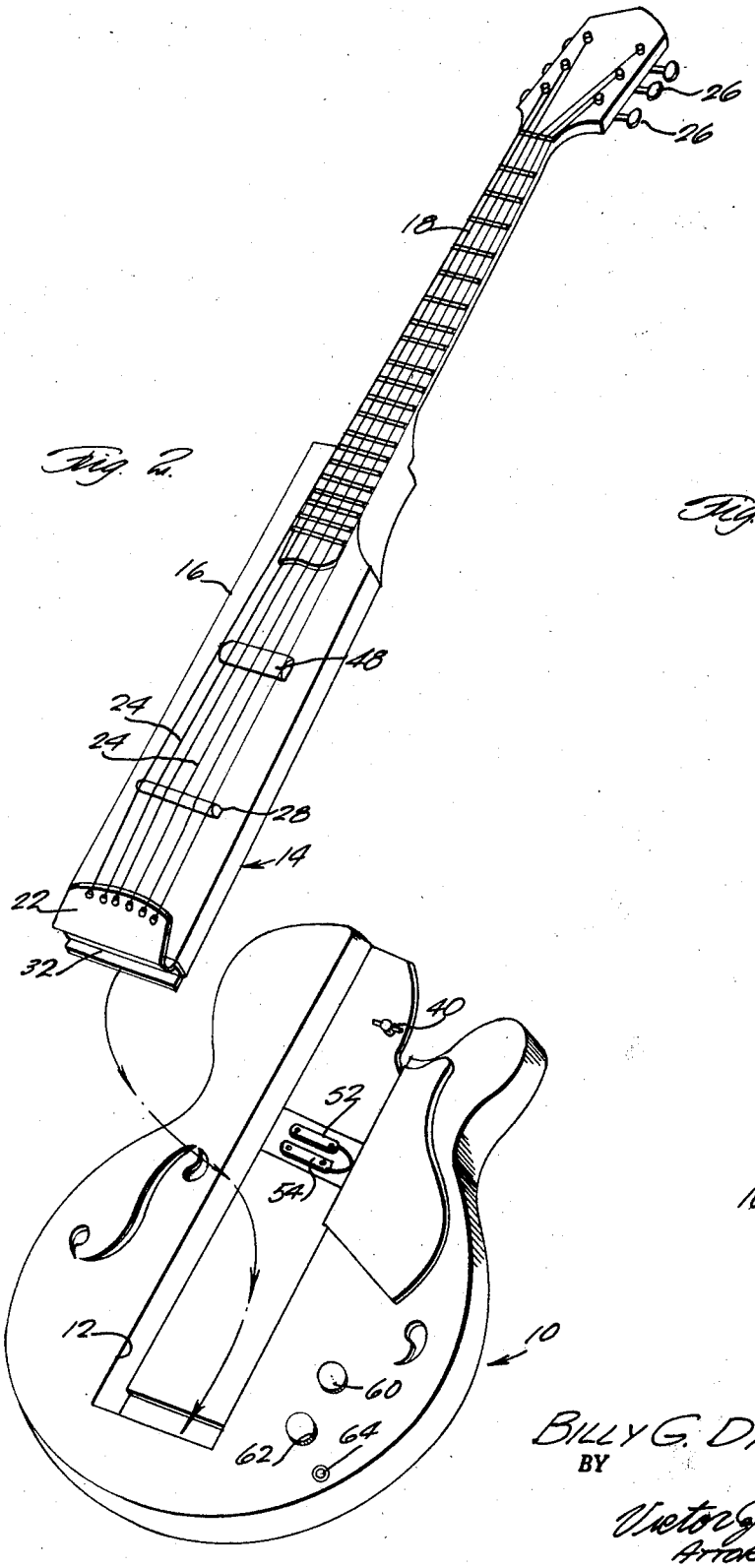


Fig. 2.

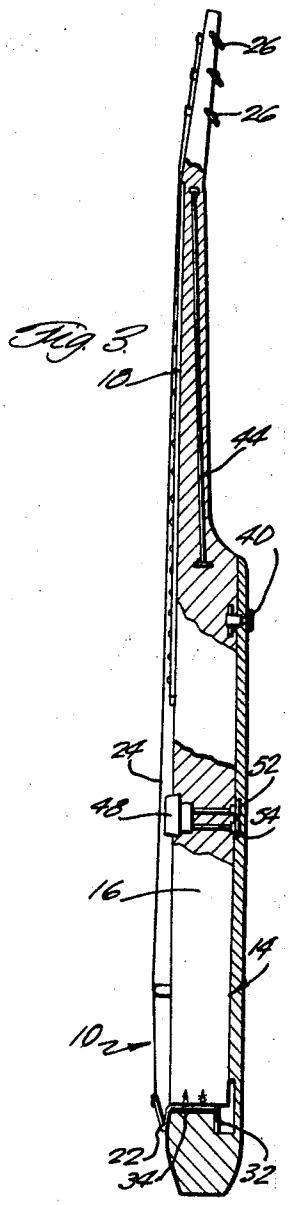


Fig. 3.

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INTERCHANGEABLE NECK ASSEMBLIES FOR ELECTRICAL MUSICAL INSTRUMENTS

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ABSTRACT OF THE DISCLOSURE

Interchangeable neck assemblies for electrical musical instruments in which a quick disconnect and interchangeable neck assembly that is pre-tuned and capable of being attached and integrated into electric amplifier circuits is constructed for selected musical instruments.

The present invention relates to an improved combination of interchangeable parts for a multiple instrument assembly, and more particularly the invention relates to a two-piece electric guitar, or other musical instrument capable of being converted to other multiple instruments, by use of an interchangeable neck assembly that is pre-tuned and capable of being attached and integrated into electric amplifier circuit for the selected musical instrument to which it is secured.

An object, therefore, of the present invention is to provide an electric guitar, or other musical instrument convertible to use with other musical instruments, by use of a common interchangeable neck assembly.

Another object of the invention is to provide a musical instrument which may have its neck and finger board assembly perfectly pre-tuned and capable of being removed from one musical assembly to another, whether the instrument is of the electrical variety or otherwise. It is within the scope of the invention to provide an improved neck body and finger board assembly for interchangeable use with electrical instruments, in which the interchangeable neck assembly may be integrated into any of the electrical pick-up and amplifier arrangements that are used with the desired electrical musical instrument to which it is attached.

The above and other objects and advantages of the invention will become apparent upon full consideration of the following detailed description and accompanying drawings in which:

FIGURE 1 is a generally perspective view of the interchangeable neck assembly of the present invention being secured to an electric guitar, and in which the interchangeable neck assembly may be removed and applied to other musical instruments, in accordance with the preferred embodiment of the invention;

FIGURE 2 shows an exploded view in which is shown the manner in which the interchangeable neck assembly may be removed and re-applied to the musical instrument, the musical instrument being an electric guitar;

FIGURE 3 shows a cross-sectional view taken along the length of the interchangeable neck and finger board assembly, showing features of the present invention; and

FIGURE 4 shows a rear view of the interchangeable neck assembly shown in FIGURE 3.

Referring now to the drawings, there is shown a musical instrument, such as an electric guitar body **10**, the electric guitar body having any of several desired contours. The central upper portion of the guitar body **10** is disposed to include a recess **12** throughout the length thereof, as shown in FIGURE 2, for receiving a connecting portion **14** of an interchangeable neck and finger board assembly **16, 18**. The neck **16** and the finger board **18** are secured together in the manner well known in the art. At the distal end of the neck **16**, there is mounted a tail piece **22** on the end of the neck body from which

the strings **24, 24**, may be mounted and be disposed to extend to the pegs **26** as they are disposed over the finger board. The strings **24, 24** are disposed from a bridge element **28** for providing fixed tuning for the strings as they are brought into tension by the pegs **26, 26**, respectively. The strings **24, 24**, may be permanently tuned as the neck assembly and finger board **16, 18** are displaced and removed from the musical body **10** onto a similar body.

As the finger board and neck assembly are mounted upon a musical body adapted for receiving it, the tail piece contains a clip or flange element **32** adapted to fit under a head or flange receiving means **34** so that the neck arrangement **16** is adapted to be securely and snugly engaged into the connecting portion of the musical instrument **10**. Distally disposed from the connecting means provided by the flange member **32** and the head **34**, there is a neck lock means such as a Dzus twist lock or other equivalent means for providing a turn locking element **40** for securing the neck assembly firmly and securely onto the musical instrument **10**. The tail piece **22**, therefore, is and includes what may also be termed a ledge lock or ledge lock means such as provided by the inclined portions and flanged elements of the tail piece **22**, the flange portion **32**, and the connecting or engaging portion of head **34**. The neck body is also seen to contain a truss rod **44** for providing the necessary strength and other attending functions incident to the construction and assembly of the truss rod, and the neck assembly also may contain the conventional pickup means **48** which is provided with friction contact elements **52, 54** that are adapted to be included in an electrical circuit including a volume control knob **60** and a tone control knob **62**, together with a jack **64**.

The holding of the neck assembly by the operator at the finger board area will enable one to raise the neck assembly away from the guitar body **10** until approximately two-thirds of the neck assembly has cleared the guitar body, and this is accomplished in removing the neck and finger board assembly from the musical instrument body **10**. The time required for removal or reassembly of the elements together is two or three seconds, and the instrument is always ready to be played, since the strings are conveniently pre-tuned prior to assembly or disassembly of the component parts of the musical body.

It is within the scope of the present invention to use the same stringed neck assembly for a guitar, including a tenor and a bass guitar, a mandolin, and banjos of the electrical and other variety.

It is within the scope of the present invention to use more than one pickup, as desirable, and this is understood without any further illustration in the drawings. This would require no further basic structural changes in the neck assembly, although it is understood of course that the neck assembly may be designed so that an aperture may be disposed so that it is concentric with the similar aperture as provided in guitar bodies.

Vibrato tailpieces may also be utilized on the neck assembly, and this is within the contemplation of the present invention and is adapted thereto.

Additional embodiments of the invention in this specification will occur to others and therefore it is intended that the scope of the invention be limited only by the appended claims and not by the embodiment described hereinabove. Accordingly, reference should be made to the following claims in determining the full scope of the invention.

What is claimed is:

1. An interchangeable neck assembly for electrical and other musical instruments comprising a neck body and finger board assembly integrally disposed and having a bridge for supporting the strings between the ends of the neck body and finger board assembly, a ledge lock

means having interfitting inclined portion and flanged element at the connecting end of said neck body for interfitting with a contoured portion of a musical instrument, and a neck lock means distally disposed from said ledge lock means for securing the neck body and finger board assembly onto said musical instrument.

2. The invention according to claim 1 wherein said neck lock assembly is a twist lock means.

3. The invention according to claim 1 wherein said inclined flanged portion for the tailpiece of said ledge lock means firmly secures said ledge lock means to said musical instrument.

4. The invention according to claim 1 wherein a bridge is disposed for suspending the strings from the neck body and finger board assembly and maintain the strings in a substantially fixed tuned condition depending upon the setting of the pegs thereof, an electrical pickup means disposed in the body of said neck body and electrical contacts disposed on the bottom portion of said neck body for contacting mating electrical contacts of said musical instrument and being adapted to complete a circuit with said pickup means, of an electrical musical instrument.

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