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(56) Documents cited

GB 2245754 A US 4750398 A GB 2035640 A US 4677893 A

**GB 1372195 A** 

(58) Field of search

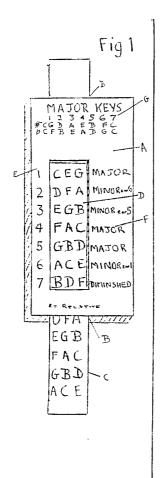
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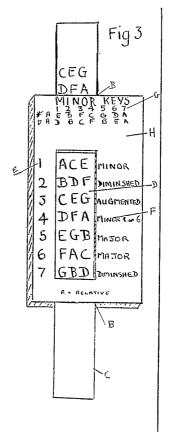
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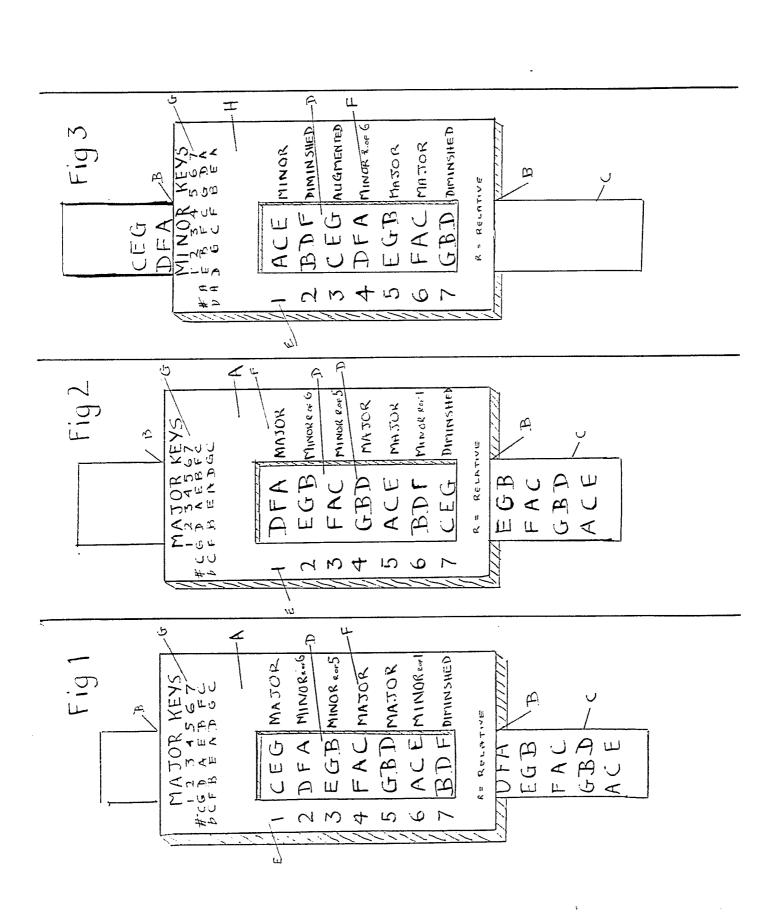
#### (54) Harmony slide rule

(57) A double-sided slide rule, one side for major and the reverse for minor keys, printed on the left with numbers 1 - 7 which indicate the seven different chords of a scale. On the right of the number is an aperture D the same length. The chords are printed in order on a separate rule C which slides up and down. Seven chords appear in the aperture alongside the numbers 1 - 7; to the right of the aperture is the musical description of the chords and their relationships to others. Thus by sliding the rule and placing the tonic or key chord level with the No. 1. all the other chords fall into their relative positions and have their description on the right.

For quick easy reference a list of keys in their sharp and flat order is printed on top.







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#### HARMONY SLIDE RULE

This invention relates to a Harmony Slide Rule for music.

Harmony is a combination of musical intervals sounded simultaneously. Writing Harmony requires a test of memory and some calculations to find the most suitable chords which can be used.

According to the present invention there is provided a Harmony Slide Rule which can be altered according to the key required, showing at a glance the various chords applicable to that particular key, a description of the chord, whether major, minor or dimished, and the relationships of the chords to others in the scale.

The slide also shows the sharps and flats in their order from scale one to seven.

The rule has two sides, one for major, and one for minor keys.

A specific embodiment of the invention will now be described by way of example with reference to the accompanying drawing in which:

Figure 1 shows the slide rule in position using the key of  ${\tt C}$  Major as the tonic chord No.1.

Figure 2 shows the slide rule using the key of D Major as the tonic chord 1.

Figure 3 shows the reverse of the rule (Minor side) using the key of E Minor as the tonic chord 1.

Figure 4 shows the slide part removed, showing sufficient length for the first chord 'CEG' to become level with No. '1' on the rule and enough chords for the last chord 'BEG' to have seven chords following.

Referring to the drawing, the slide rule comprises a double sided rule A with a slot through the centre B for the sliding The sliding piece C is printed with a list of chords starting from 'CEG' then 'DFA' etc. downwards until it reaches the seventh chord 'ACE' of the seventh degree of the scale 'BDF' so that all keys are covered with seven chords. As the rule C slides up and down the chords appear in an aperture D in the centre of the rule A and appear opposite a list of downwardprinted numbers E on the left of the rule. Placing the key required against No.1 (E) all the relevant chords appear against the numbers on the left E in their particular sequence in the On the right hand side of the rule A a list of the description of the chords is printed F showing whether a chord is major, minor, dimished or augmented and their relationships to other keys.

The reverse side of the rule is printed in the same way except that minor keys are used instead of major. H. The slide C has both sides printed exactly the same.

A list of keys with sharps and flats numbered 1 - 7 is printed on the top of the rule A marked G

#### CLAIMS

- 1. A Harmony Slide Rule which can be altered according to the key required, showing at a glance the various chords applicable to that particular key, a description of the chord, whether major, minor, diminished or augmented, and the relationships of the chords to others in the scale.
- 2. A rule used as a slide to fit into the Harmony Slide Rule as in Claim 1 and printed with an alphabetical list of chords in sufficient length to accommodate all seven keys with seven chords for each key.
- 3. A list of numbers from 1 7 going downwards on the slide Rule in Claim 1 on the left hand side of the aperture.
- 4. A description of the chords, whether major, minor dimished or augmented printed on the right hand side of the aperture in Claim 1 and on the same levels as the numbers 1 7 as in Claim 3 also the relationships of these chords to others i.e as in Fig 1 'Relative minor of chord 6' which is placed opposide the number 2 on the left.
- 4. The 7 Major keys in order of sharps and also of flats printed on top on the Rule in Claim 1.
- 5 The reverse of the rule is printed in the exact same way as Claims 1 2 3 and 4 using Minor keys instead of Major.

# Patents Act 1977 Examiner's report to the Comptroller under Section 17 (The Search Report)

Application number

9125871		9125871.5
Relevant Technical	ields	
(i) UK CI (Edition	K ) G5X (X1,X6,X8)	Search Examiner
(ii) Int CL (Edition	5 ) G09B, G10G	S E WILLCOX
Databases (see over		
(i) UK Patent Office		Date of Search
(ii)		30 APRIL 1992

Documents considered relevant following a search in respect of claims

ALL

Category (see over)	Identity of docum	ent and relevant passages	Relevant to claim(s)
Х	GB 2245754	(MEEHAN) - Whole document	1 at least
Х	GB 2035640	(CRAIG) - Whole document	1 at least
Х	GB 1372195	(MULLER) - Whole document	1 at least
Х	US 4750398	(RUDE) - Whole document	1 at least
x	US 4677893	(FAHNESTOCK) - Whole document	1 at least

Identity of document and relevant passages	Relevant to claim(s
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