Paper Ref	Sheet	Percentage Mark Awarded
FD3	1 of 15	62%

Examiner's use only

Claim Amendments

1. A ~~violin~~ mute system for a violin family musical instrument comprising: a mute, and a magnet counterpart on a tailpiece of the instrument when in use; the mute comprising: a clamping portion ~~(7)~~; antirotation legs ~~(8a, 8b)~~ configured to extend~~ing~~ down on either side of ~~the~~ two middle strings of the ~~violin~~musical instrument; a central leg ~~(10)~~ configured to extend~~ing~~ under the strings, preventing the mute from coming loose and acting as a guide as the mute is moved between a rest position and a working position; two downwardly and outwardly extending channels ~~(9)~~ for the strings between the anti-rotation legs ~~(8)~~ and the central leg ~~(10)~~, the channels configured to provid~~e~~~~ing~~ unrestricted movement of the mute between the rest position and the working position; and a retaining means comprising an in-built magnet ~~(6)~~ for holding the mute against ~~the end of the tailpiece~~the magnet counterpart at the tailpiece ~~when not in use~~in the rest position.

3

10

3

1

2. A mute system according to claim 1, having a further leg ~~(4)~~ on the side of the mute remote from the tailpiece, forming a channel ~~(7)~~ for application of the mute to ~~the~~ a ~~violin~~ bridge of the instrument.

~~3. A mute according to claim 1 or 2, wherein the retaining means is constituted by an inbuilt magnet (6) in the mute.~~

Page sub-total 17

~~4~~3. A mute system according to claim 1 and being made of moulded rubber or plastics material.

~~5~~4. A mute system according to claim 1 and having a circular outline, the channels ~~(9)~~ being approximately radial.

Additional Dependent Claims

5. A mute system according to any preceding claim, wherein the magnet counterpart is a steel, or steel core, clip to be fitted to the tail piece. ✓ 1

6. A mute system according to claim 5, wherein the steel, or steel core, clip comprises flexible tooth jaws.

7. A mute system according to claim 5 or 6, wherein the steel, or steel core, clip comprises a flexible PVC coating.

8. A mute system according to any of claims 1-4, wherein the magnet counterpart is integrated into the tailpiece of the musical instrument. 1

9. A mute system according to any preceding claim, wherein the mute comprises an insert hole for the magnet. 1

10. A mute system according to any preceding claim, wherein the downwardly and outwardly extending channels are 2-3mm wide. 1

11. A mute system according to claim 2, wherein the channel for application of the mute to the bridge is wide enough to ensure adequate clamping.

Page sub-total 4

Examiner's use only

12. A mute system according to any preceding claim, wherein the central leg comprises a flared foot extending under the strings.

1

MARKS AWARDED: 22/37

17 + 5

22

Page sub-total

1

Divisional Claims

1. A mute system for a violin family musical instrument comprising: a mute, and a counterpart on a tailpiece of the instrument when in use; the mute comprising: a clamping portion; antirotation legs configured to extend down on either side of two middle strings of the musical instrument; a central leg configured to extend under the strings, preventing the mute from coming loose and acting as a guide as the mute is moved between a rest position and a working position; two downwardly and outwardly extending channels for the strings between the anti-rotation legs and the central leg , the channels configured to provide unrestricted movement of the mute between the rest position and the working position; and a retaining means comprising an elastic retainer for holding the mute against the tailpiece in the rest position.

1. A mute system for a violin family musical instrument comprising: a mute, and a counterpart on a tailpiece of the instrument when in use; the mute comprising: a clamping portion; antirotation legs configured to extend down on either side of two middle strings of the musical instrument; a central leg configured to extend under the strings, preventing the mute from coming loose and acting as a guide as the mute is moved between a rest position and a working position; two downwardly and outwardly extending channels for the strings between the anti-rotation legs and the central leg , the channels configured to provide unrestricted movement of the mute between the rest

position and the working position; and a retaining means comprising tacky pad for holding the mute against the tailpiece in the rest position.

Examiner's use only

Letter to IPO

I hereby respond to the Examination report under Section 18(3) of 15 July 2020 by the deadline 15 November 2020.

In response to the objections raised, I enclose a copy of the claims as amended to replace the claims previously on file.

Amendments

Claim 1 has been amended to define a "mute system for a violin family musical instrument…comprising a mute, and a magnet counterpart at a tailpiece of the instrument", instead of a "violin mute" as previously presented. Basis for this amendment can be found throughout the application as originally filed, for example page 4, lines 3-6 define the invention relating to mutes for the violin family of musical instruments. Additional basis can be found in page 5, lines 23-24-20 which defines the invention as a mute system for violin family musical instruments. I note the specific description described the invention with reference to a violin only, however this is merely exemplary and non-limiting, and the features of the violin correspond to other violin instruments in such a way that the skilled person could readily apply the mute system to all instruments in the violin family.

Basis for defining the magnet counterpart can be found at page 7, lines 21-25 and page 8, lines 27-30. We note the specific examples refer to a steel, or steel core, clip as the magnetic counterpart, however the description on page 8, lines 23-30 provide clear basis for other parts of magnetic counterparts and moreover the provision of other non-steel, magnetic counterparts would not be beyond the

Page sub-total

–

Examiner's use only

standard workings of the skilled person who would be able to provide a counterpart of appropriate material for engagement with the magnet.

The claim has been amended to refer to the mute system and defined with respect to its use on a violin family instrument. As such, terms such as "configured to" and "in use" have been introduced where relevant. I submit that these merely form clarifications and as such no new subject-matter has been introduced. Moreover, the specific description refers at several points to the mute system being configured to attach to the violin in use. ✓

4

Claim 1 has also been amended to define the retaining means as "comprising an in-built magnet for holding the mute against the magnet counterpart at the tailpiece in the rest position." Basis for this amendment can be found in previous claim 3 and page 7, lines 21-25. As discussed above, it is not necessary for the magnet counterpart to be limited to a steel, or steel core clip, as this is only one example, and page 8, lines 23-30 provide basis for other types of magnet counterparts. ✓

In light of these amendments claim 3 has been deleted. ✓

In addition to the amendment to the independent claim, new dependent claims 5-12 have been included. Basis for this claims can be found in the table below:

Claim	Basis
5	Page 7, lines 23-25
6	Page 8, lines 1-2
7	Page 7, lines 33-34

Page sub-total

4

Examiner's use only

8	Page 8, lines 27-28
9	Page 7, lines 28-29
10	Page 7, lines 7-8
11	Page 7, lines 10-12
12	Page 7, lines 15-20

✓

3/4

Clarity

The Examiner objects at item 5 that it is unclear where the violin or strings are part of what is claimed. I submit that in light of the amendments to the claim above, it is clear that the claim is directed to the mute system comprising of a mute and a magnet counterpart which is for use with a musical instrument of the violin family. The use of terms such as "in use" and "configured to" make it clear that the instrument and strings are not claimed, but the mute system is limited by its interaction with them. ✓

Additionally, at item 6 the Examiner objects that it is unclear how the magent works with the violin. I submit that this objection is overcome by the introduction of the magnet counterpart at the tailpiece. ✓

3/4

Novelty

The Examiner objects at item 2 that claim 1 lacks novelty over D1. The applicant respectfully submits that this is not the case. D1 refers to an improve mute for bowed instruments that remains attached to the violin when it is not being used

Page sub-total

6

Examiner's use only

for damping the violin. The violin of D1 remains attached when not in use via an elastic cord 12 (p. 11, l. 6-8 and p. 12, l. 1-7). The elastic cord is attached to a groove 11 on the mute 1 and passes under the tailpiece to be connected to a pin 23 on the end of the violin. In contrast, claim 1 defines an in-built magnet on the mute which holds the mute against a magnet counterpart at the tailpiece, as opposed to an elastic loop. This is clearly a different arrangement that that disclosed in D1. Claim 1 is therefore novel over D1. ✓ 3/4

We note the Examiner has not objected that claim 1 lacks novelty over D2 and D3. However, for completeness we note that D2 also relates to a mute for stringed instruments, but when the mute is not in use it is allowed to rest freel on the strings between the bridge and the tail piece (p. 16, l. 26-29). As such there is no disclosure of a retaining means including an in-built magnet and counterpart at the tailpiece. Claim 1 is therefore novel over D2. ✓ 2

D3 relates to a holder for a pencil and as such does not disclose a mute for a musical instrument and claim 1 is clearly novel over this citation. ✓ 1

Inventive Step

Applying Windsurfer/Pozzoli the person skilled in the art (PSA) would be considered someone who designs and manufactures musical instrument accessories, in particular mutes. ✓

The common general knowledge (CGK) of the PSA would include known types of mutes such as those disclosed in D2 as these are considered well known. The CGK would also include the contents of D3 which was published in a

Page sub-total 6

Examiner's use only

musicians supplies catalogue which would be standard reading for the PSA who is involved in the manufacture and design of musical instrument accessories.

2

Considering claim 1, the inventive concept is the provision of an in-built magnet on the mute and a magnet counterpart at the tailpiece for holding it in position in the rest position. This makes the mute very easy to handle and it can be held in position when at rest without being loose in a manner that does not move or rattle on the strings as the instrument is being played so that it is quiet to operate and is not required to be fixed to the strings or via an elastic extension (see page 5, lines 24-29 of the application). Moreover, the use of a magnet means that no force is exerted on the mute when it is in the working position, which would be the case if it was attached via an elastic means.

✓

✓

The state of the art for claim 1 can be considered D1 as this discloses the most common features and is intended to solve similar problems of maintaining the mute in a readily accessible manner.

The difference between D1 and claim 1 is that the retaining means of claim 1 uses an in-built magnet on the mute and a magnet counterpart at the tailpiece, whereas D1 uses an elastic cord connecting the mute to an end pin. The elastic cord of D1 would apply

In order to arrive at the claimed invention the PSA would be required to remove the elastic cord, provide an in-built magnet on the mute, and a magnet counterpart on the tailpiece. The applicant submits that these differences would not be obvious to the PSA based on the CGK.

✓

Page sub-total

2

Examiner's use only

The teaching of D1 focusses heavily on the use of an elastic cord and is primarily concerned with overcoming the issue of the mute being ready to hand when needed, which is does by retaining it against the tailpiece. D1 is not concerned with noise as the elastic member can be allowed to spring back against the tailpiece. Page 12, lines 18-19 state that the mute can be guided but there is still ✓ scope for the mute being sprung back. In any event, there is not teaching of any kind relating to the tailpiece being fitted with a magnet counterpart for use with a in-built magnet on the spring.

3/4

D2 provides not additional teaching that would lead the PSA to the claimed invention. D2 relates to a conventional mute that is allowed to rest freely on the strings and thus would rattle considerably during use. Therefore, if combined with the teaching of D2 the PSA would be no closer to the claimed invention. ✓

1

D3 does discuss the use of magnets, however it is for holding a pencil. The problem referred to is similar in concept in that it is so the pencil is easy to access during rehearsals. However, the magnet holds the pencil using a spring ✓ and is fixed to a metal stand, other alternative locations give are fridges, cupboards and standard lamps. Hence, there is no teaching of applying pencil holder of D3 to the tailpiece of a spring instrument. The PSA considering improvements to D1 would consider D3 and then be aware of the use of magnets. However, there is nothing to suggest a specific location of the magnet counterpart at the tailpiece, or of the provision of an in-built magnet in the mute. ✓

2

Claim 1 is therefore inventive over the cited prior art.

Page sub-total

6

Examiner's use only

Further Remarks

In light of the amendments above, I submit that this application is in order for acceptance.

The applicant may wish to file a divisional application and so will rely on the one month window provided by the s18(4) communication if it is forthcoming.

1/1

Yours faithfully,

Mr Bottomley

MARKS AWARDED: 25/34

25

Page sub-total 1

Examiner's use only

Memo to Client

Thank you for your comments on the prior art. Please find attached a draft response for your consideration. The deadline for filing the response is 15 November 20200, although a two month as of right extension can be obtained if required. ✓ 2

I am of the opinion the Examiner was correct to object to claim 1 on the basis of ✓ D1 as it disclosed a violin mute 1 with a clamping portion made of up prongs 2-7 where two of the prongs extend either side around two strings (p. 11, l. 24-25). The mute is also movable between a working position and a resting position and is held in the resting position by the elastic loop 12 which acts as a retaining means to hold it against the tail piece of the violin. ✓ 4/5

Hence it is necessary to amend the claim. The most suitable amendment in view of the prior art was to include the magnet and counterpart. There should be sufficient basis for the broad term magnet counterpart, as opposed to the steel, ✓ or steel core, clip referred to the in the specific description. I was conscious not to limit to a steel clip as you state in your letter that it has been difficult to make and therefore may be objected to on the grounds of sufficiency as the description does not sufficiently disclose how it can be made to attach to the tailpiece. I have included the steel clip limitation as an additional dependent claim.

The amended claim now does not cover the use of a tacky pad as it explicitly ✓ recites a magnet. However, I trust that this is not a problem given that your prototypes rapidly loose adhesion and so may not be commercially viable option.

Page sub-total 6

Examiner's use only

If you wish to pursue this we can do so as a divisional application. I have set out a possible claim for this in the attached. I have also included another possible divisional claim using the elastic retainer which my provide of some benefit, but may struggle for patentability over D1 unless it can be shown that there is a benefit of the elastic member being attached to the tailpiece, as opposed to the end pin in D1. ✓ 5/8

I have also broadened the scope of the claim slightly to define a mute system for a violin family instrument. The claim now covers the mute system only that is suitable for use with any instrument of the violin family, rather than explicitly requiring a violin as previously presented. I trust that this would be of more commercially viable scope for protection. In connection with this the claims have been amended to refer to the mute being configured to attach to the instrument. ✓ ✓

Other possible amendment considered were to define the middle leg being longer and comprising a flared foot. This provides the technical effect of maintaining the mute on the strings so that it is not accidentally removed. However, on balance this is arguable disclosed in D1, or at least the flared foot part, and then it may be obvious to simply make member 3 in Fig 1 longer. ✓ 1

I note you have requested the possibility of amending the claim, or including a new claim, where the mute is fit over a single-string. However, the entire description of the patent relates to it being fit over two strings and, moreover, page 7, lines 3-14 recite the need for two channels for the two middle strings to prevent it from being accidentally rotated off the instrument. Hence, there is no support in the application for a mute fit over a single string and there is no sufficient teaching for the PSA to provide such a mute as the disclosure makes it ✓ 2

Page sub-total 8

Examiner's use only

clear that two strings are necessary. It was therefore not possible to include it here and moreover, it may not be possible to form part of a divisional application as this also requires there to be basis in the as filed application. We can of course file a new application directed to this feature as it does not appear to have been disclosed in the prior art. Both D1 and D2 require the mount to be fit over two strings and therefore fitting it over one may be inventive. ✓

I have also removed reference numbers from the claims as these are not required in GB patent application.

The additional dependent claims could form suitable fall-back options which appear to contribute to the common problem of allowing the mute to move silently over the strings and be easy to handle, such as the specific dimension of the channels being significantly wider than the strings to allow free movement. ✓

1

I look forward to hearing from you.

MARKS AWARDED: 15/29

15

Page sub-total

1