

**INTELLECTUAL PROPERTY OFFICE OF SINGAPORE QUALIFYING EXAMINATION
FOR THE REGISTRATION OF PATENT AGENTS**

**PAPER B: Date of Examination = 26 Mar 2002
TITLE: AMENDMENT OF A PATENT SPECIFICATION**

**Maximum Time: 3 Hours + 15 Minutes of reading time
Maximum Marks: 100 Points**

INSTRUCTION TO CANDIDATES

1. 15 minutes of reading time is provided. You are advised to spend this time reading the instructions and the question(s) before you attempt to answer the question(s).
2. Write your answers in English. Answers in any other language will not be marked.
3. Only your answers to the question(s) written or pasted in the Answer Booklet (that is provided by the Examination Secretariat) would be considered. You are advised to write on one side of each sheet in the Answer Booklet and to commence your answer to each question (where applicable) on a fresh sheet.
4. You should accept the facts given in the paper and not use any special knowledge you may have. Assume also that the prior art given is exhaustive.
5. In this paper you should assume that a Singapore Patent Application has been filed and that a Written Opinion has been issued. You have sent the Written Opinion to the client who has replied in the attached letter.

Your task is to prepare a draft reply to the Written Opinion to the Intellectual Property Office of Singapore (IPOS). (For the purposes of this paper you do not need to propose any amendments to the description of the Patent Application).

The basis for any amendment proposed to the claims should be indicated where possible candidates must cite sections, rules or other legal basis relevant to their answers.

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(I) Client's Letter

Dear Patent Agent,

Thank you for the Written Opinion and the extract from US patent 4066109.

As far as I can see there are two main differences between my invention and the pencil sharpener described in the US patent. With my pencil sharpener rotation of a pencil to be sharpened will always be anti clockwise. In the sharpener of the US patent rotation can be either clockwise or anti clockwise depending upon which bore the pencil is put into.

The other important difference is that in the US arrangement only a part of a pencil in the bore is engaged by the blade.

Please amend the claims as you see fit in order to distinguish over the US patent. As to claim 4, can you please argue against the objection?

By the way, I have realised that I can sell the sharpeners without blades and make a very much bigger profit. Can you ensure that the patent will cover that?

Yours faithfully,
Client.

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(II) Singapore Patent Application No 555555

1.This invention relates to a pencil sharpener.

2.In spite of the widespread use of ball point pens, traditional pencils of wood surrounding a pencil lead are still extensively used, particularly in schools, offices, and especially by draughtsmen in drawing offices. One of the well known disadvantages of traditional pencils is that as the lead wears down with use it must be resharpened, This resharpening usually involves the removal of some of the wood surrounding an end of the pencil lead followed by chamfering the lead to a point, This can be done with a knife but nowadays it is more usual to employ a pencil sharpener.

3.Conventional hand held, manually operated pencil sharpeners generally comprise a housing surrounding a conical bore with a narrow slot extending along the bore. A blade is positioned in or on, the housing so that the sharp edge of the blade extends along the slot and lies tangentially to the conical bore. In use a pencil to be sharpened is inserted into the conical bore and rotated relative to the blade whereby the blade engages the pencil. By urging the pencil into the bore during rotation the blade progressively removes the wooden surround until the pencil lead is exposed whereupon further rotation together with continued urging of the pencil into the bore causes the blade to engage the pencil lead and produce a sharp point on it.

4.One of the problems with the conventional pencil sharpeners is that the blades eventually become blunt and the sharpening ability of the pencil sharpener is reduced.

5.The present invention addresses this problem.

6.According to the invention there is provided a pencil sharpener comprising a housing, a conical bore in the housing, a slot extending along the bore, a blade positioned so that the sharp edge extends along the slot and lies tangentially to the conical bore, characterised in that the blade is removable.

7.Thus with the invention, when the blade has become blunt it can be removed for resharpening or replacement with a fresh blade.

8.In a preferred embodiment of the invention the blade is a conventional safety razor blade. Such blades are discarded when of no further use for shaving even though the edges are still quite sharp and certainly sharp enough for sharpening pencils.

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

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10. Figure 1 is a plan view of a pencil sharpener of the invention, and Figure 2 is an end view of the sharpener of Figure 1 looking in the direction of the arrow A in Figure 1.

11. Referring to the drawing the pencil sharpener comprises a housing 10 preferably of plastics which is of generally rectangular section. A first conical bore 12 extends from one side of the housing. A second bore 14 extends from the opposite side of the housing spaced from and parallel to the first bore but facing in the opposite direction to the first bore. A slot 16 extends along the length of bore 12 and slot 18 extends along the length of bore 14.

12. A safety razor blade 19 is seated on the housing. The sharpened edges 20 and 22 of the blade are located in the slots 16 and 18 respectively. The blade is held in place by locating lugs 24 on the housing which project through holes in the blade and by a screw 26 which passes through the blade into the housing.

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Claims

1. A pencil sharpener comprising a housing a conical bore in the housing, a slot extending along the bore, a blade positioned so that the sharp edge extends along the slot and lies tangentially to the conical bore, characterised in that the blade is removable.
2. A pencil sharpener as claimed in claim 1, wherein the blade is a safety razor blade with two sharp edges parallel to each other.
3. A pencil sharpener as claimed in claim 2, wherein a second conical bore is provided in the housing, the axes of the two bores being parallel, there being a slot along the second bore, the second sharp edge on the blade extending along the slot in the second bore and being tangential to the second bore.
4. A pencil sharpener as claimed in any preceding claim wherein the housing is made of plastics.

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(III) Written Opinion

Statement

Novelty (N)	Claims 4	Yes
	Claims 1-3	No
Inventive step (IS)	Claims 1-3	Yes
	Claims 4	No
Industrial applicability (IA)	Claims 1-4	Yes
	Claims	No

Citations and explanations

The subject matter of claims 1 to 3 is not novel. Your attention is drawn to US Patent 4066109 which describes the pencil sharpener of the claims.

The subject matter of claim 4 lacks inventive step. It would be a matter of routine to make the housing from plastic material.

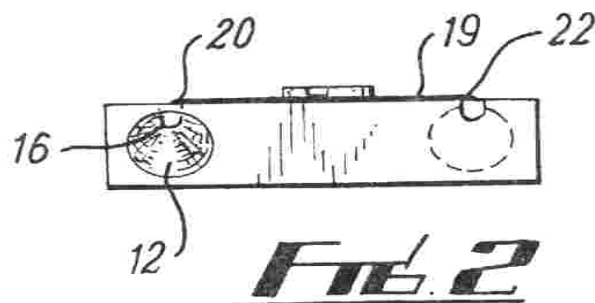
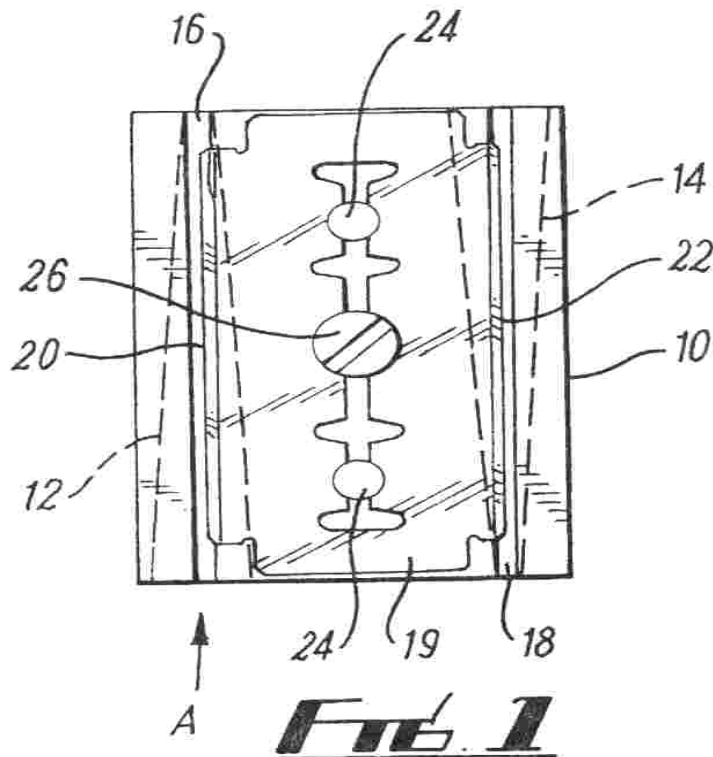
Certain observations on the application

Claim 3 is not fully supported by the description as required by Section 25(5)(c).

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(IV) Extract from US Patent No 4066109

The hand held pencil sharpener can be seen in Figure 1. It comprises a housing 2 enclosing three conical bores 12, 13 and 14. The relative arrangement of these bores can be seen in Figure 5. Two conical bores 12 and 14 extend from one side of the housing and the other 13 extends from the opposite side of the housing. The axes of all three bores are parallel.

Slots 16 and 17 extend along the conical bores. A safety razor blade 24 is sited in the housing so that its edges 28 and 29 coincide with the slots 16 and 17. The blade is held in place by studs 26 and a screw 40.

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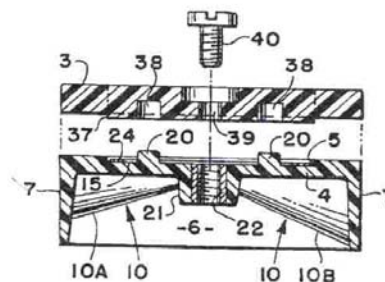
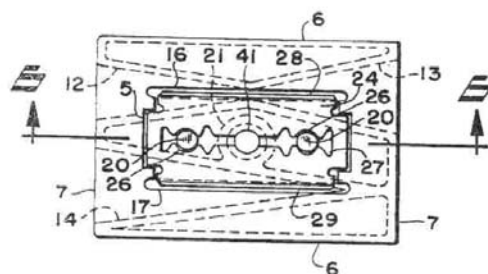
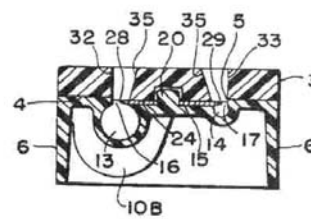
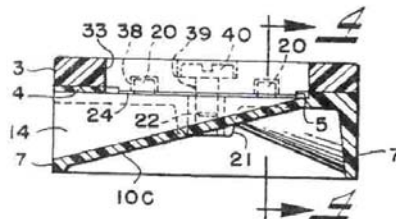
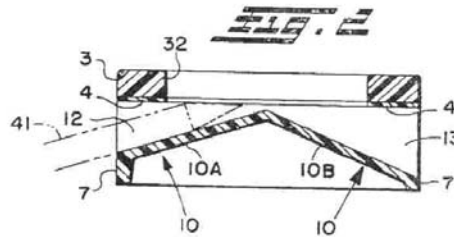
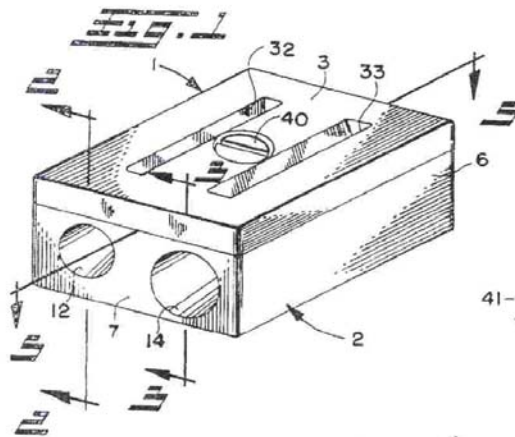
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U.S. Patent

Jan. 3, 1978

4,066,109



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