

QE 2018 PAPER B - ANSWER GUIDELINES

S/N	Category	Mark
1	Claim Amendments	35 marks
2	Response	35 marks
3	Letter to Client	30 marks
Total		100 marks

S/N	Answer Guide	Mark
1	Claims Amendments	(35 marks)
1.1	<p>Amendments to independent claims</p> <p>In order to achieve full marks, amended claim 1 must have the following two features (in addition to the two features already present in claim 1 of the loop element being 0.1 mm to 2.5 mm higher than each hook element and each hook element being made of a filamentous material of 400 to 700 denier):</p> <p>Feature 1: that in each row, each hook element has a loop element on each side thereof.</p> <p>AND</p> <p>Feature 2: that the hook elements to the total of the hook elements and loop elements in each row is of a distribution ratio of approximately 33 percent (this is partially from claim 3 but requires expansion on what the “ratio of 33 percent” of claim 3 refers to).</p> <p>If candidate only inserts one feature, this will make the claims novel but will not address the inventive step and support objections.</p> <p>If candidate only inserts claim 3 into claim 1 without amending the language but has feature 1 above, then candidate will score 10 marks.</p> <p>Consequently, the method independent claim will then need to reflect the above two features as well as well as address the antecedent issues in original claim 11.</p>	<p>(20 marks total)</p> <p>13 marks</p> <p>OR</p> <p>6 marks</p> <p>OR</p> <p>10 marks</p>

	<p>Feature 1</p> <p>Feature 2</p> <ul style="list-style-type: none"> - If candidate only mentions the “ratio of 33 percent” (by incorporating the subject matter of claim 3 without further expansion on what this ratio refers to), candidate will only score 1 mark here. <p>2 marks here if candidate only presents one feature in the amended method claim.</p> <p>Addressing the antecedent issue in method claim, which can be done by charactering the hook-and-loop fastener in the preamble OR merely referring to the “hook-and-loop fastener of any one of the preceding claims/claim 1, etc”.</p> <p>No marks if candidates delete any of the pending features in claim 1 since those are stated to be features that are required for the fastener to work (that is, they are “essential features”).</p> <p>Also, no marks if the candidates include a feature directed to a “non-uniform distance” since that will exclude Figure 1 at least from the scope of the claims. Marks will not be awarded to any candidate who unnecessarily limits the claim scope without explicit instructions from client.</p>	<p>2 marks</p> <p>2 marks OR 1 mark</p> <p>2 mark</p> <p>3 marks</p>
1.2	<p>Following amendments will score points (non-exhaustive):</p> <ul style="list-style-type: none"> • Delete claim 3 • Define what the distance in claim 5 (now claim 4) refers to (<u>distance between adjacent loop elements and a distance between adjacent hook element and loop element</u>) 	<p>(15 marks total)</p> <p>1 mark</p> <p>2 marks</p>

	<ul style="list-style-type: none"> ○ Amend dependency to refer to claim 4 (now claim 3) 	1 mark
	<ul style="list-style-type: none"> • Amend dependency of claim 6 (now claim 5) to refer to claim 1 or 2 OR claim 1 	1 mark
	<ul style="list-style-type: none"> • Define what the distance in claim 7 (now claim 6) refers to (<u>distance between adjacent loop elements and the distance between adjacent hook element and loop element⁽²⁾</u> is lesser than the distance <u>between adjacent loop elements and the distance between adjacent hook element and loop element⁽²⁾</u>). <p>Alternatively, this can be split up into two dependent claims, one directed to the distance between adjacent loop elements and the other directed to the distance between adjacent hook elements and loop element, but both have to be dependent on the previous claim.</p>	4 marks
		OR
		If each “distance” is split into separate dependent claims, then each claim is
		2 marks
	<ul style="list-style-type: none"> ○ Defining that the region is on the “base web” for clarity 	1 mark
	<ul style="list-style-type: none"> ○ Amending the dependency to refer to the previous claim (claim 5 in the answer claim set) 	1 mark
	<ul style="list-style-type: none"> • Amending dependency of claim 8 (now claim 7) to refer to any one of preceding claims or to claim 1. 	1 mark
	<ul style="list-style-type: none"> • Amending dependency of claim 9 (now claim 8) to refer to any one of claims 1 to 6 or to claim 1. NB, dependency of this claim should not include claim 8 (now claim 7). 	1 mark
	<ul style="list-style-type: none"> • Amending dependency of claim 10 (now claim 9) to refer to any one of claims 1 to 6 or to claim 1. NB, dependency 	1 mark

	<p>of this claim should not include claims 8 and 9 (now claims 7 and 8).</p> <ul style="list-style-type: none"> ○ Amending “the same as” to “different to” to properly reflect Fig. 6 <p>NB: New claims 3 and 4 are one embodiment, new claims 5 and 6 are another embodiment different to new claims 3 and 4, and new claims 7 to 9 are mutually exclusive. Candidate will not score on the dependency marks if this is not reflected properly in the amended claims.</p> <p><i>The Sample Claims are provided on the last two pages of the Answer Guidelines.</i></p>	1 mark
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2	Response	(35 marks)
2.1	<p>Support</p> <p>Point out literal support for each amendment under 1.1 and 1.2 : 6 marks maximum for product claims, 2 marks maximum for method claims. Support shown below is not exhaustive and if the support provided by candidate is correct, marks will be awarded.</p> <p>For example:</p> <p>Support for amended claim 1 is based on <u>former claim 3, when read with paragraph [016] lines 11 and 12⁽¹⁾</u>. The feature <u>“each hook element has a loop element on each side thereof”</u> is supported by <u>paragraph [016], lines 12 and 13⁽¹⁾</u>.</p> <p>Claim 5 (now claim 4) that defines the distance “between adjacent loop elements and a distance between adjacent hook element and loop element” is supported by paragraph [017] lines 5 and 6 (or Fig. 2).</p> <p>Claim 7 (now claim 6) that defines the distance “between adjacent loop elements and the distance between adjacent hook element and loop element” in one region “of the base web” is lesser than the distance “between adjacent loop elements and the distance between adjacent hook element and loop element” in another region “of the base web” is supported by paragraph [018] lines 14 to 18. If this is split up, the support for the distance between adjacent loop elements is in paragraph [018] lines 14 to 16 and that for the distance between the adjacent hook element and loop element is in paragraph [018] 16 to 18 (or Fig. 3).</p> <p>Claim 10 (now claim 9), support for amending it to “different to” is found in paragraph [019] lines 12 to 14 (or Fig. 6).</p> <p>Support for independent method claim is <u>similar to that for claim 1⁽¹⁾</u>. Additional support for the characterization of the hook-and-loop</p>	<p>(8 marks total)</p> <p>1 mark</p> <p>1 mark</p> <p>1 mark</p> <p>2 marks</p> <p>OR</p> <p>1 mark each if split up</p> <p>1 mark</p> <p>1 mark</p>

[illegible]

	<p>If candidate states that original claim 1 is already novel over D1 because D1 does not mention the denier of the filamentous material of 400 to 700 denier, this is incorrect because D1 does refer to the filamentous material of D2 which does state that the filamentous material is 400 to 700 denier. If this is provided as the main novelty argument, then no marks is to be awarded.</p> <p><u>D2</u></p> <p>Amended claim 1 is novel over D2 because D2 does not disclose the arrangement of the hook elements (where in each row, each hook element has a loop element on each side thereof) and/or that the distribution ratio of the hook elements to the total of the hook elements and loop elements is 33%.</p> <p>When referring to Figure 3 of D2, although diagram 3 shows that the distribution ratio is 33% (see first, second, fifth and sixth rows), they do not have the loop elements on each side of the hook element and this is not on an “each row” basis.</p> <p>Hence, any or both of the above features will render amended claim 1 novel over D2.</p> <p>If a candidate states that original claim 1 is already novel over D2 because D2 does not mention the loop element is 0.1 mm to 2.5 mm higher than each hook element, this is incorrect because paragraph [012] lines 20 and 21 does state that the loop should be cut so that the “difference in height between the loops and hooks is around 10% the height of the loop”, with the height of the loops defined in paragraph [011] lines 16 and 17 as following that in the prior art, which is stated to be 1 mm to 4 mm in paragraph [003] line 16. Hence, taking the height of the loop to be 1 mm to 4 mm, 10% of that is 0.1 mm to 0.4 mm, which is a narrower range than in original claim 1, thus rendering original claim 1 not to be novel. If</p>	<p>3 marks</p>
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	<p>this is provided as the main novelty argument, then no marks is to be awarded.</p> <p>Method claim 10 is also novel in view of D1 and D2 because it now requires the specific arrangement of the hook and loop elements and the distribution ratio.</p> <p><u>General comments:</u></p> <ul style="list-style-type: none"> • Answers based on non-novel dependent claims: 0 marks • Arguments based on limiting amendments: 0 marks • Arguments based on features not present in amended claims: 0 marks 	1 mark
2.4	<p>Inventive step</p> <p>Need to consider D1 and D2 singly and in combination.</p> <p>Windsurfer approach – approach must be applied and full analysis provided</p> <ul style="list-style-type: none"> • Full marks against each document given only if some technical explanation is given of (a) new technical advantages accorded by inventive feature, (b) why it is to be considered there is absence of teachings or teachings away based on the documents. <p>Understanding that the inventive concept lies in the combination of a number of features. As mentioned in paragraph [016] lines 18 to 32, the following features are combined:</p> <ol style="list-style-type: none"> 1) Hook element having a loop element on each side thereof; 2) Loop element being higher than hook element (already present in original claim 1); 3) Distribution ratio of hook elements to total of hook elements and loop elements being 33 %; and 	<p>(12 marks total)</p> <p>1 mark</p> <p>2 marks</p>

<p>4) Filamentous material of 400 to 700 denier (already present in original claim 1),</p> <p>to obtain the following advantages:</p> <ol style="list-style-type: none"> 1) Firm engagement of the hook elements and loop elements when matching pieces are placed face-to-face with each other; 2) Hook-and-loop fastener is still flexible notwithstanding the harder filamentous material 3) Intermeshing forces are enhanced 4) Hook-and-loop fastener more immune to accidental peeling away (not so easily detachable). 		<p>2 marks</p>
<p>Objective of D1:</p> <p>To have a surface fastener that has sufficient engagement force so as not to damage a fabric upon accidental engagement with the fabric and to have a good touch feeling of the surface fastener.</p>		<p>1 mark</p>
<p>Objective of D2:</p> <p>Easily attachable and <u>detachable</u> fasteners which can be hooked safely and accurately.</p>		<p>1 mark</p>
<p>D1 does not teach or suggest modifying the fastener to alter the distribution ratio and/or include the loop neighbouring each hook feature.</p>		<p>1 mark</p>
<p>D2 does not teach or suggest modifying the fastener to alter the distribution ratio or to have a loop element on each side of a hook element. It would not be permissible to mix and match diagrams 3 and 4 of Figure 3 to come up with a fastener that has a distribution ratio of 33% and with loop elements on both sides of the hook element since D2 states that these patterns are alternate examples and does not suggest that these patterns can be combined.</p>		<p>2 marks</p>

<p>The combination of D1 and D2 would also not teach or suggest modifying the fastener to alter the distribution ratio. As none of the prior art documents, when combined, would lead a person skilled in the art to arrive at a hook-and-loop fastener having the combined features above, and none of the prior art documents remedy the deficiency of one another, the combination of the prior art documents D1 to D2 would not have taught a person skilled in the art to arrive at the hook-and-loop fastener as presently amended. At the most, a person skilled in the art would combine the fastener of D1 with the pattern 4 of Figure 3 of D2 since they are of the same pattern but this would not motivate a person skilled in the art to alter the patterns to arrive at the distribution ratio of 33% since the patterns are specified in D2 to be alternate embodiments and there are many distribution ratios in D2 such that the person skilled in the art cannot say that one is preferred over the other.</p>	<p>1 mark</p>
<p>The method of making the hook-and-loop fastener would also not be obvious since the arrangement and distribution ratio of the hook elements and loop elements are now specified.</p>	<p>1 mark</p>
<p><u>General comments:</u></p> <ul style="list-style-type: none"> • Answers based on non-inventive dependent claims: 0 marks • If candidate states “amended Claim is neither taught nor suggested” without further substantiation: 0 marks • Arguments based on features not in claims: 0 marks 	

2.5	Clarity and support	(8 marks total)
	Clarity issues addressed – dependency updated and antecedent issues addressed by characterizing the relevant terms in the amended claims	2 marks
	Support issues addressed – all four essential features are now present in amended claim 1.	3 marks
	The four essential features as defined by paragraph [016] lines 28 to 33 of the application where the “above features” are required to ensure that the intermeshing forces are enhanced and accidental peeling away is minimized.	3 marks

3	Client Letter	(30 marks)
3.1	Timelines	(3 marks total)
	Since this is a request for <u>search and examination (reference to Section 29(5) in the Written Opinion)</u> , the deadline to respond to the Written Opinion is <u>5 months from date on IPOS letter and not 3 months</u> .	1 mark
	Therefore, actual deadline to respond is 30 December 2018.	1 mark
3.2	Combination of D1 and D2	(6 marks total)
	Usually, under novelty assessment, it is not permissible to combine prior art documents.	1 mark
	(NOTE: This is provided in the Examination Guidelines where an exception to this is when one of the documents directs the reader to study the other. Any cross-reference from one document to another must show that part or all of the disclosure of the second referenced document be considered as part of the disclosure of the cited document and the use of expressions such as “incorporated by reference” when referring to the second document in the cited document may suggest such necessity. For example, a cited document may refer explicitly to a second document as being incorporated by reference for providing more detailed information on certain features identified in the cited document. In this case, the teaching of the second referenced document would be regarded as part of the disclosure of the cited document for the purposes of enablement, only if the second referenced document was also available to the public at the publication date of the cited document (paragraph 3.31).)	
	Hence, <u>paragraph [010] of D1 makes an explicit reference to the filamentous material of D2⁽²⁾</u> and that the D2 reference is <u>incorporated by reference⁽¹⁾</u> . In addition, <u>D2 was also available to</u>	2 marks
		1 mark

	<u>the public at the publication date of D1, being published on 15 October 2010, which was before the publication date of D1 (being 1 January 2018)⁽²⁾.</u>	2 marks
3.3	Significance of D3	(13 marks total)
	D3 is a document that falls within the grace period provision and should be disregarded.	1 mark
	D3 relates to the same fastener as recited in the patent application.	1 mark
	D3 was disclosed <u>within the period of 12 months⁽¹⁾</u> immediately preceding the date of filing the application. <u>Available online on 1 December 2017, which is within the 12 months period before the filing date (30 May 2017 to 30 May 2018, 30 May 2018 being the application filing date)⁽¹⁾.</u>	1 mark 1 mark
	In addition, D3 was disclosed after the Amended Patents Act came into effect (30 October 2017) (based on transitional provisions S4(2) in (Amendments Act).	1 mark
	Patent application was filed after the Amended Patents Act came into effect (filing date was 30 May 2018).	1 mark
	<u>Disclosure was made to the public by the inventor⁽¹⁾ in any circumstances not described in paragraphs (a) to (d)⁽¹⁾, briefly, not obtained unlawfully, not in breach of confidence, not at an international exhibition and not at any learned society (disclosure was published with the knowledge of the CEO⁽¹⁾)</u>	1 mark 1 mark 1 mark
	Therefore, D3 falls under of ambit of Section 14(4)(e).	
	As there are <u>three authors but only two of them are inventors⁽¹⁾</u> , when responding to the Written Opinion, the applicant must file	1 mark

	<p><u>written evidence enclosing supporting documents (that makes out a sufficient <i>prima facie</i> case) via a Statutory Declaration or Affidavit⁽¹⁾ which needs to show that the disclosure was made to the public “by the inventor, or by a person who obtained the matter directly or indirectly from the inventor”. <u>Since all of the authors are employees in the research team, a case can be made out that the last author obtained the matter directly or indirectly from the inventor(s)⁽¹⁾.</u></u></p> <p>Thus, it would be possible to patent the hook-and-loop fastener in Singapore.</p>	<p>1 mark</p> <p>1 mark</p> <p>1 mark</p>
3.4	<p>Tape-sized and tape dispenser</p> <p>Tape-sized fastener was cut out from the mat-sized fastener of the patent application. Hence, it has the same features as the mat-sized fastener and does not appear to be a new invention.</p> <p>Tape-sized fastener and <u>dispenser not mentioned in the present application⁽¹⁾, so <u>not possible to add them as claims into the present application in view of added matter issues⁽¹⁾.</u></u></p> <p>Not possible to add the new claims as a divisional application too since not mentioned at all in the present application.</p> <p>Only way is to file as a <u>new convention application, claiming priority to the present application⁽¹⁾, and adding in the new features of the tape-sized fastener and fastener tape dispenser into the description and claims⁽¹⁾.</u></p> <p><u>Convention deadline is 30 May 2019⁽¹⁾, however to ensure that D3 is still disregarded as prior art, new application must be filed within 12 months from 1 December 2017, or 1 December 2018⁽¹⁾.</u></p>	<p>(8 marks total)</p> <p>1 mark</p> <p>1 mark</p> <p>1 mark</p> <p>1 mark</p> <p>1 mark</p> <p>1 mark</p>

Sample Claims

1. A hook-and-loop fastener comprising a base web, a multiplicity of hook elements and loop elements mounted on the base web in rows and columns, each loop element being 0.1 mm to 2.5 mm higher than each hook element, wherein in each row, each hook element has a loop element on each side thereof, wherein the hook elements to the total of the hook elements and loop elements is of a distribution ratio of approximately 33 percent in each row, and each hook element being-is made of a filamentous material of 400 to 700 denier.

2. The hook-and-loop fastener according to claim 1, wherein the loop element is made of a polymeric material.

~~3. The hook-and-loop fastener according to claim 1 or 2, having a ratio of 33 percent.~~

~~4.3.~~ The hook-and-loop fastener according to any one of the preceding claims, wherein two loop elements are interposed between every adjacent hook element.

~~5.4.~~ The hook-and-loop fastener according to ~~any one of the preceding claims,~~ claim 3, wherein ~~the a~~ a distance between adjacent loop elements and a distance between adjacent hook element and loop element is non-uniform.

~~6.5.~~ The hook-and-loop fastener according to ~~any one of the preceding claims~~ 1 or 2, wherein one, two or three loop elements are interposed between every adjacent hook element.

~~7.6.~~ The hook-and-loop fastener according to claim ~~25,~~ wherein the distance between adjacent loop elements and the distance between adjacent hook element and loop element in one region of the base web is lesser than the distance between adjacent loop elements and the distance between adjacent hook element and loop element in another region of the base web. [Alternatively, this can be split up into two dependent claims, one directed to the distance between adjacent loop elements and the other directed to the distance between adjacent hook elements and loop element, but both have to be dependent on the previous claim.]

8.7. The hook-and-loop fastener according to ~~claim 5~~any one of the preceding claims, wherein the hook elements and loop elements arranged in one row are the same as those arranged in another row.

9.8. The hook-and-loop fastener according to any one of ~~the preceding~~ claims 1 to 6, wherein the hook and loop elements arranged in one row are different to those arranged in an adjacently row.

10.9. The hook-and-loop fastener according to any one of ~~the preceding~~ claims 1 to 6, wherein the hook and loop elements arranged in three rows are ~~the same as~~different to those arranged in the next three rows.

[NB: New claims 3 and 4 are one embodiment, new claims 5 and 6 are another embodiment different to new claims 3 and 4, and new claims 7 to 9 are mutually exclusive.]

11.10. A method of making a hook-and-loop fastener comprising a base web and a multiplicity of hook elements and loop elements mounted on the base web in rows and columns, the method comprising the steps of weaving the loop elements into the base web, weaving ~~the a~~ filamentous material of 400 to 700 denier into the base web and cutting the filamentous material to form the hook elements such that each loop element is 0.1 mm to 2.5 mm higher than each hook element, wherein in each row, each hook element has a loop element on each side thereof and wherein the hook elements to the total of the hook elements and loop elements is of a distribution ratio of approximately 33 percent in each row. [Alternatively, possible to refer to the hook-and-loop fastener of any one of the preceding claims.]

12.11. The method of claim 11.10, further comprising the step of identifying positions of the hook elements and loop elements on the base web.

END