INTELLECTUAL PROPERTY OFFICE OF SINGAPORE

QE 2017 PAPER C – ANSWER GUIDELINES

S/N	Category	Marks
1	Construction	29.5m
2	Infringement Analysis	22m
3	Validity – Novelty	27.5m
4	Validity – Inventive Step	10m
5	Miscellaneous Issues	11m
		100m

(i) Construction (29.5 marks)

Claim	Feature	Meaning	Marks
1	Confectionary product	Either any confectionary product or a hard candy	1
	comprising	Must include all features listed in the claim, but not limited thereto	2
	integrated body portion	the confectionary product is unitary in nature (e.g. see example and hard candy)	3
	at least two distinct regions	must have two regions, but can have more distinct - at least two of the regions are chemically and physically different from one another (page 6, line 19 - 24) and require presence of a sweetener base (page 6, line 7 - 12)	1 2
	adjacent regions respectively contain different sweetener bases	Normal meaning of adjacent is “nearby or in contact with”. While the specification depicts adjacent regions being in direct contact with each other, this is only in an embodiment and so it does not contradict the normal meaning. As such, full marks	4

		awarded for reasoned argument for use of normal meaning. Up to 2 marks awarded for reasoned argument based on direct contact only.	
	at least one region substantially contains	Means the confectionary must have one region that has a sugar free sweetener base.	1
		The sweetener base forms the majority of the region, but it can contain other components (e.g. see examples).	2
	a sugar free sweetener base	Something that is not a sugar, but provides a sweet taste.	2
2	a first region..., a second region	Must have one region that includes isomalt and one region that includes xylitol, but can have other regions	1
	...second region adjacent to the first region	Similar discussion on meaning of adjacent to Claim 1	0.5
3	any two adjacent regions	Each region in direct contact/close proximity with each other	0.5
	different crystal grain sizes	Plain meaning	0.5
	typically	Not limited to the following feature	2
	the crystal grain sizes of all the regions are distinct	All regions must have a different crystal grain size	1
4	distinct regions contains less than about 20% by weight of plant extracts	Numerical value: discussion of word about - note p5, lines 4-6 - what does less than about mean - does it include 20%? Does it include over 20%, such as 20.4? Reasoned discussion of this point and conclusion will result in full marks	2
		plant extract means something taken from a plant (page 8, line 25 - 31) and different to a flavouring	1

	and less than 2% by weight of flavours and colorants	Flavouring: something that provides the flavour of a thing, but is not necessary an extract (page 9, line 1 - 9) Colourants: something that provides colour	1
		2wt% : marks awarded for reasoned argument for 2wt% of both flavourings and colourings; or for reasoned argument for 2wt% to relate to the combined wt% of flavourings and colourings (identify 2 possibilities but candidate must choose 1 for construction)	2
			29.5m

(ii) Infringement Analysis (22 marks)

(if conclusion inconsistent with analysis, -3 for claim 1, and -1 for each dependent claim)

Embodiment 1				
Claim	**Feature**	**Meaning**	**Present in the product?**	**Marks**
1	Confectionary product	Either any confectionary product or a hard candy	Yes - it is a gobstopper, which is both a confectionary product and a hard candy	0.5
	integrated body portion	The confectionary product is unitary in nature (e.g. see examples and hard candy)	Yes - gobstopper, where at least regions 110-130 are an integrated body portion	1
	at least two distinct regions	Must have two regions, but can have more Distinct - at least two of the regions are chemically and physically different from one another and must contain a sweetener base	Yes - layers 110 and 130 - presence of layer 120 does not affect this	1
	adjacent regions respectively contain different sweetener bases	Close proximity/direct contact of regions	Yes - layers 110 and 130 are in close proximity to one another and have different sweetener bases; Can obtain mark if adjacent construed differently - provided reasonable construction	2

Embodiment 1				
Claim	**Feature**	**Meaning**	**Present in the product?**	**Marks**
	at least one region substantially contains a sugar free sweetener base	one region must not contain sugar, but is composed in the main by a sugar free sugar base, but it can have other components	Yes - layer 130, which contains xylitol along with other components	1
2	a first region..., a second region	Must have one region that includes isomalt and one region that includes xylitol, but can have other regions	No - does not contain both isomalt and xylitol	1
	...second region adjacent to the first region	close proximity/direct contact	Cannot have this feature as does not have both isomalt and xylitol	
3	any two adjacent regions have different crystal grain sizes	each region in direct contact/close proximity to each other have different crystal grain sizes	No - all regions have same crystal grain size (page 16, line 6 - 9)	1.5
	typically wherein the crystal grain sizes of all the regions are distinct	Non- limiting but all regions have a different crystal grain size	No - *Ibid*	0.5
4	distinct and discrete regions respectively and selectively contains less than 20% by weight of plant extracts	Numerical range: 20.4? plant extract means something taken from a plant and different to a flavouring	Depends on construction as to whether this is yes or no - mark awarded if consistent with construction provided	1.5
	and less than 2% by weight of	Flavouring: something that provides the flavour of a thing,	Yes	1

Embodiment 1				
Claim	**Feature**	**Meaning**	**Present in the product?**	**Marks**
	flavours and colorants	but is not necessary an extract (page 9, line 1-9) Colourants: something that provides colour 2wt% : depending on construction		

Embodiment 2				
Claim	**Feature**	**Meaning**	**Present in the product?**	**Marks**
1	Confectionary product	Either any confectionary product or a hard candy	Yes - a hard candy	0.5
	integrated body portion	The confectionary product is unitary in nature (e.g. see examples and hard candy)	Yes - hard candy	0.5
	at least two distinct regions	Must have two regions, but can have more Distinct - at least two of the regions are chemically and physically different from one another and must contain a sweetener base	Yes - multiple layers 200-230 contain different sweeteners and so are physically and chemically distinct from one another	0.5
	adjacent regions respectively contain different sweetener bases	Close proximity/direct contact of regions	Yes - layers 200-230 contain sucrose, sorbitol and xylitol and some are in direct contact	2
	at least one region substantially contains a sugar	One region must not contain sugar, but is composed in the main by a sugar free sugar	Yes - layers 200-230 contain sorbitol, isomalt, sorbitol and xylitol, respectively	1

Embodiment 2				
Claim	**Feature**	**Meaning**	**Present in the product?**	**Marks**
	free sweetener base	base, but it can have other components		
2	a first region..., a second region	Must have one region that includes isomalt and one region that includes xylitol, but can have other regions	Yes both isomalt and xylitol present in separate regions	1
	...second region adjacent to the first region	Close proximity/direct contact	Yes - thin layer separates, so adjacent. Marks can be awarded here if answer is no based on a reasoned construction of the term "adjacent"	2
3	any two adjacent regions have different crystal grain sizes	Each region in direct contact/close proximity to each other have different crystal grain sizes	Yes - all regions have different crystal grain size (page 17, line 5 - 6)	1.5
	typically wherein the crystal grain sizes of all the regions are distinct	Non- limiting but all regions have a different crystal grain size	Yes - *Ibid*	
4	distinct and discrete regions respectively and selectively contains less than 20% by weight of plant extracts	Numerical range: plain meaning plant extract means something taken from a plant	Yes - each region has less than 20wt% of an extract	1

Embodiment 2				
Claim	**Feature**	**Meaning**	**Present in the product?**	**Marks**
	and less than 2% by weight of flavours and colorants	Flavouring: something that provides the flavour of a thing, but is not necessary an extract Colourants: something that provides colour 2wt% : depending on construction	No layer 210 has 15wt% of a flavouring	1
				22m

(iii) Validity – Novelty (27.5 marks)

Document C				
Claim	**Feature**	**Meaning**	**Present in the product?**	**Marks**
1	Confectionary product	Either any confectionary product or a hard candy	Yes - confectionary product example, which looks like a hard candy	0.5
	integrated body portion	The confectionary product is unitary in nature (e.g. see examples and hard candy)	Yes - hard candy	1
	at least two distinct regions	Must have two regions, but can have more Distinct - at least two of the regions are chemically and physically different from one another and must contain a sweetener base	Yes - main portion 120 and regions 140, 160	1
	adjacent regions respectively contain different sweetener bases	Close proximity/direct contact of regions	Yes - layers 120 and 140/160 contain sorbitol and xylitol, respectively; If candidate says no - marks awarded if reasoned argument provided for one of the 140 units and 160 being in close proximity - i.e. adjacent	2
	at least one region substantially contains a sugar	one region must not contain sugar, but is composed in the main by a sugar free sugar base, but it can have other components	Yes - layers 120 and 140/160 contain sorbitol and xylitol, respectively	1

Document C				
Claim	**Feature**	**Meaning**	**Present in the product?**	**Marks**
	free sweetener base			
2	a first region..., a second region	Must have one region that includes isomalt and one region that includes xylitol, but can have other regions	No - does not contain both isomalt and xylitol	1
	...second region adjacent to the first region	close proximity/direct contact	Cannot have this feature as does not have both isomalt and xylitol	
3	any two adjacent regions have different crystal grain sizes	each region in direct contact/close proximity to each other have different crystal grain sizes	No - crystal grain size not mentioned	1
	typically wherein the crystal grain sizes of all the regions are distinct	Non- limiting but all regions have a different crystal grain size	No - *Ibid*	
4	distinct and discrete regions respectively and selectively contains less than 20% by weight of plant extracts	numerical range: 20.4? plant extract means something taken from a plant and different to a flavouring	Yes - each region has no plant extract	1
	and less than 2% by weight of flavours and colorants	Flavouring: something that provides the flavour of a thing, but is not necessary an extract Colourants: something that provides colour	No, layer 120 has 4wt% of vanilla flavouring	1

Document C				
Claim	**Feature**	**Meaning**	**Present in the product?**	**Marks**
		2wt% : depending on construction		

Document D, Embodiment 1				
Claim	**Feature**	**Meaning**	**Present in the product?**	**Marks**
1	Confectionary product	Either any confectionary product or a hard candy	Yes - confectionary product example, which looks like a hard candy	0.5
	integrated body portion	The confectionary product is unitary in nature (e.g. see examples and hard candy)	Yes - hard candy	1
	at least two distinct regions	Must have two regions, but can have more Distinct - at least two of the regions are chemically and physically different from one another and must contain a sweetener base	Yes - 2 and 3 - nut is not a region	1
	adjacent regions respectively contain different sweetener bases	Close proximity/direct contact of regions	Yes - layers 2 and 3 contain mannitol/lactitol and sorbitol, respectively	1
	at least one region substantially contains a sugar free sweetener base	One region must not contain sugar, but is composed in the main by a sugar free sugar base, but it can have other components	Yes - layers 2 and 3 contain mannitol/lactitol and sorbitol, respectively	1

2	a first region..., a second region	Must have one region that includes isomalt and one region that includes xylitol, but can have other regions	No - does not contain both isomalt and xylitol	1
	...second region adjacent to the first region	Close proximity/direct contact	Cannot have this feature as does not have both isomalt and xylitol	
3	any two adjacent regions have different crystal grain sizes	Each region in direct contact/close proximity to each other have different crystal grain sizes	No - crystal grain size not mentioned	1
	typically wherein the crystal grain sizes of all the regions are distinct	Non- limiting but all regions have a different crystal grain size	No - *Ibid*	
4	distinct and discrete regions respectively and selectively contains less than 20% by weight of plant extracts	Numerical range: 20.4? plant extract means something taken from a plant and different to a flavouring	Yes - each region has no plant extract	1
	and less than 2% by weight of flavours and colorants	Flavouring: something that provides the flavour of a thing, but is not necessary an extract Colourants: something that provides colour 2wt% : depending on construction	No, Wt% is not mentioned	

Document D, Embodiment 2				
Claim	**Feature**	**Meaning**	**Present in the product?**	**Marks**
1	Confectionary product	Either any confectionary product or a hard candy	Yes - confectionary product example, which looks like a hard candy	0.5
	Integrated body portion	The confectionary product is unitary in nature (e.g. see examples and hard candy)	Yes - hard candy	1
	At least two distinct regions	Must have two regions, but can have more Distinct - at least two of the regions are chemically and physically different from one another and must contain a sweetener base	Yes - 10-40	1
	Adjacent regions respectively contain different sweetener bases	Close proximity/direct contact of regions	Yes - layers 10/20 and 30 contain mannitol and lactitol and regions containing same sweetener not in close proximity	2
	At least one region substantially contains a sugar free sweetener base	One region must not contain sugar, but is composed in the main by a sugar free sugar base, but it can have other components	Yes - layers 10/20 and 30 contain mannitol and lactitol	1
2	a first region..., a second region	Must have one region that includes isomalt and one	No - does not contain both isomalt and xylitol	1

		region that includes xylitol, but can have other regions		
	...second region adjacent to the first region	Close proximity/direct contact	Cannot have this feature as does not have both isomalt and xylitol	
3	any two adjacent regions have different crystal grain sizes	Each region in direct contact/close proximity to each other have different crystal grain sizes	No - crystal grain size is the same in the regions	1
	typically wherein the crystal grain sizes of all the regions are distinct	Non- limiting but all regions have a different crystal grain size	No - *Ibid*	
4	distinct and discrete regions respectively and selectively contains less than 20% by weight of plant extracts	Numerical range: 20.4? plant extract means something taken from a plant and different to a flavouring	Yes - when dependent upon claims 1, 2, and 3 (as dependent upon Claim 1); No for all other claim dependencies	2
	and less than 2% by weight of flavours and colorants	Flavouring: something that provides the flavour of a thing, but is not necessary an extract Colourants: something that provides colour 2wt% : depending on construction	Yes	1
				27.5m

(iv) Validity – Inventive step (10 marks)

S/N	Validity – Inventive step	Marks
	Document C is Section 14(3) prior art and so is only available for novelty purposes. If candidate uses Document C for inventive step, no marks will be awarded for the entire section. Only the embodiments of Document D can be used for an inventive step analysis. A brief consideration of all claims is necessary, though Claim 1appears to lack novelty. It is noted that the ranges of extracts, colourants and flavourings would appear to be reasonably standard and so a simple obviousness argument can be constructed against Claim 4.	2
	Claim 2 alone requires the use of specific sweetener bases - isomalt and xylitol. Document D discloses these bases in a list with other materials, but does not use them in combination in the embodiments provided. Marks were awarded for arguments for the obviousness/non-obviousness of this feature depending on how convincingly the arguments were presented.	3.5
	Claim 3 alone requires that any two adjacent regions in the composition have a different crystal grain size. Arguments were awarded for considering whether this combination would be obvious/non-obvious.	3.5
	A mark was awarded for candidates who considered the non-limiting portion of Claim 3 as a potential amendment to the claims.	1
	However, a mark was subtracted if this feature was considered limiting	-1
		10m

(v) Miscellaneous (11 marks)

S/N	Miscellaneous		Marks
A	Client question (i)	Discuss whether Groundless threats conditions met for both articles, for client and stockists - and what needs to be proved to succeed in a groundless threats action	5
B	Client question (ii)	Discuss compulsory licencing regime in Singapore. Consider practical situation - is the Chinese company just about to launch or not, or are they simply looking to get a licencing fee?	4
C		Marks awarded for discussion of possible amendments that would strengthen case and cause issues for at least one of client's products.	2
			11m

S/N	Miscellaneous	Marks
A	Client cannot lodge groundless threats action with respect to the acts they conduct because they make a product for disposal in Singapore (S77(4) SPA). But customers of client only sell the product in Singapore and the exemption provided by S77(4) SPA does not apply for these threats. S77(1) SPA states that any person who is aggrieved by the threat of patent infringement can lodge a groundless threats action. Therefore, client or their customers can separately or together lodge groundless threats actions. No marks will be awarded if candidate simply says "groundless threats" without further elaboration. The aggrieved parties needs to be identified.	2.5
	Proof that the Chinese company made the threat of patent infringement to the client's customers is needed. The letter addressed to client's customer signed by (or for) the Chinese company would appear to be sufficient.	0.5

	Groundless threats action will only succeed if product found not to infringe or the patent is invalid with respect to the relevant claims (S77(2)) - discussion on this point with respect to validity/infringement conclusions made by candidate expected, as well as which remedies are available.	2
B	The Chinese company does not appear to be satisfying any demand in Singapore have threatened patent infringement instead of seeking a licensee. As such, they may be engaging in an anti-competitive practice under S55 SPA because the product launch appears to show demand for product in Singapore.	2
	Client may point out this provision to the Chinese company in negotiations or could seek a licence under these terms if the Chinese company does not give them a licence.	1
	Need to point out to client that if the Chinese company start to fulfil demand in Singapore, then any licence provided under these contentions proceedings may be rescinded (S55(5) SPA). As such, better to try to negotiate a mutually beneficial licence for (infringing) products.	1
C	Possible amendments include the addition of Claim 2 and/or Claim 3 into Claim 1, which would result in infringement issues for the beta cooler pyramid product.	2
		11m