

**Construction**

Claim 1:

1a “A lightweight envelope”

“envelope” – a container for containing documents.

∴ The meaning of envelope is well-known. P3, l 2-7 describe the structure and material of envelopes in general.

Note that the material is not limited to paper, and envelope does not has to have the flap – only those for delivery has. This sets the scene.

“Lightweight” – it means envelope is made from paper and has a basis weight of 80 grams per square metre or less. This is explicitly defined in P3. L 15-19. Note that although it is not preferred, paper envelope with <50 gsm is still usable and is thus part of the “lightweight” range.

1b “comprising” means including but not limited to.

1c “a pouch portion for storing documents” means that a container formed by at least a front piece/panel and a rear piece/panel which are secured together to form an enclosed space. “For” means “suitable for”.

- P3 L5-6 mentions that a pouch portion is used to hold documents – i.e. a container. P4 L25 mentions the front and rear panels. However, the pouch portion should not be construed to be limited by P4 L26-30 embodiment since other ways can be used to make the envelope, see P4 L29-30. The rectangular shape is also not a must.

1d “a flap portion... for sealing the pouch portion”.

“flap portion” – an extension part of the material, usually with an edge. This is well-known in the art, and such shapes are shown in Fig. 1, and described in P4, L13-14, L26-27 (note the use of “extend” in L26). However, the trapezium shape should not be used to limit the flap portion (P4, L15) since there is no indication that it must have this shape”.

“joined to the pouch portion at a fold line” – the flap portion is an integrated part of the pouch portion and their boundary is a line which is used to rotate the flap portion relative to the pouch portion.

Because Fig. 1 shows that the Fig. 1 shows the two parts made from a single sheet of material. P4, L14 shows the fold line delimiting the flap portion and how it is rotated. Also see P4, L35.

“and for sealing the pouch portion” – means “for closing an opening of the pouch portion so that documents therein are inaccessible”. See P5 L1-3, which describe how the flap portion is adhered to the pouch portion in order to seal it. This is also described in P3, L8-10. Note that sealing does not always require adhesive, note the word “usually” in P3, L7.

- 1e “one of the flap portion..... secured together” means at least one of the flap portion and the pouch portion contains sticky material so that when the flap portion is rotated toward the pouch portion they are secured together.

“one of the...” can be one, or both of the two

“adhesive” – an example is glue, see P5, L20-21, although this is not limited to glue.

“folding above the fold line” – P4, L12-13 and P4. L35-P5, L1 describe the folding.

“abutting” – this means facing relative to each other, see P4 L13 and P5 L1.

“secured together” – they are attached to each other, not easily separable. See P3, L8-10, which describe the attachment but it is not permanent.

- 1f “the flap further comprising” - means the flap portion include the following features/integers but is not limited thereto.

- 1g “tamper-evident... to open, the envelope” means structures or features showing someone attempted to or has opened the envelope and once this is done, there is no way to restore the original look.

“tamper-evident” – to show the opening or trying to opening an object. See P3 12-16, where it is provided to solve the problem of (unauthorized) opening. P5, L8-14 also describe the meaning of “tamper-evident”.

“means” – structures or features, such as those described in P4, L19-20.

“irreversibly indicate of” – once it is done once, then the envelope is not able to be restored and the indication is always there. P5, L8-14, the tear at the slits 5a and 5b cannot be removed once it is formed.

“opening or an attempt to open...” – which means the documents in the envelope are accessed or at least attempted for doing so. See P3, L8-10 “viewing, or indeed removing...”

- 1h “and at least located... flap portions” means the tamper-evident means is at least partially present at at least one side of the flap portion”

“at least” – a part or the whole tamper-evident means.

“located or towards” – is at or extended to the edge. P3, L20-24 says the slits extend from the short edge. P4, L19-20 provide similar description but this should not be limited to “slit extending”, see repercussion effect of claims 2-3

“either side” – one or both sides, or in fact any one of the 3 sides of the flap

## Claim 2

2a “An envelope... claim 1” – the envelope in claim 2 contains all the limitation of claim 1, plus following features/integers,

2b “wherein said... continuous slits” – the tamper-evident means included but not limited to two lines separating adjacent part of the envelope, and such separation is without any stops in-between. Because this is the well-known meaning of “slit”, and which is shown in Figs 1-2. Since the envelope is separated along the slits, the tear only starts at the end of the slits, see P5, L10-12.

“a pair of” – means two, as shown in Figs 1-2

“elongate” – has a length, because the slits extending inwardly from the edges. See P3 L24-25; P4, L19-20, and Figs 1-2. Following the construction of claim 1, the slits are located out or towards the side of the flap. When they are “located at”, the extending direction of the slits

## Claim 3

3a “An envelope... 1 or 2” – 1+2 or only 1

3b “wherein the tamper-evident... perforated line” means the tamper-evident means contains but not limited to a line with holes/slits at intervals. This is shown in Figs 1-2, where there are dot-shaped holes and also slits on line 6. Also due to such structure can only be the perforated line be weaker than normal parts, see P3, L21-26, P5, L12-14

## Claim 4

4a “An envelope... Claim 3” including but not limited to all integers in claim 3, so 1+2+3+4, or 1+3+4

4b “wherein the continuous slits... line of weakness... the pouch portion” means that the continuous slits (in claim 2) and the perforated line (in claim 3) form a single line which is weaker than normal portions, and that the single line across a substantial diversion of the envelope.

This claim is defected, since if claim 3 depends on claim 1 only then “continuous slits” has no antecedent basis.

However, assuming that 1+2+3+4, then:

“continuous line of weakness” – means the line is easier to tear than the normal portion of the material, see P3, L25-26. “Continuous line” is described in P5, L12-14 where the tear started at the slits with spread to the perforated line b.

“across at least a major portion...” – most part of the flap and pouch portions. P3, L28-29 describe this. Also P4, L22-24 describe that the slits are at the two

ends of the flap portion, and the perforated line is between them, therefore is across the most if not entire flap portion. Figs 1-2 illustrate this. The line across the most of the length of the envelope, thus “a substantial dimension”, no need for all dimensions.

#### Claim 5

5a “An envelope... claim 1” means including but not limited to all integers in claim 1.

5b “wherein the adhesive... continuous strip of adhesive” means adhesive is present along its entire length. This is shown in Figs 1-2, and described in P4, L3-5, and P4, L22-23 and L31-32. The continuous strip facilitates good adhering effect (see P4, L3-5).

5c “which extends across... pouch portion” means that the strip of adhesive across a substantial dimension

“across a major dimension” have the same meaning as that in claim 4 since same words are used.

#### Claim 6

6a “An envelope according to claim 1” means including but not limited to all integers of claim 1.

6b “formed from... cardboard” – the envelope is made of one or more of “paper, paperboard or cardboard”. These materials are well-known with their terms. However, this claim does not limited by a single material to make the envelope. See P3, L2-5, which mentions that  $\geq 2$  materials can be used. P4, L-25-30 also requires that the specific structure (and its materials) should not be limited.

However, in view of the definition of “lightweight” in claim 1, claim 6 is insufficient since with the limitation of claim 1, the envelope cannot be made of anything other than paper, such as a cardboard.

**MARKS AWARDED 14**

#### **Infringement**

Infringement:

The product under analysis is the “No-peek” envelope from Envelopes-4-u, as described in Document B.

Claim 1:

1a ✓ Although the weight is not mentioned for “No-peek”, P9, L15-16 says all materials that are usual can be used, and are in fact available. Lighter grade of paper is mentioned particularly.

1b ✓

- 1c ✓ “a body” is used in Doc B but it is in fact a pouch portion, as shown in the figure in Doc B. P9 L1 mentions “open”, so it is suitable for storing documents.
- 1d ✓ the flap and the folding line are shown in Doc B drawing. P8, L12-14 says the flap and the body (pouch portion) can be secured to each other, and there is a folding line. P8 L29-30 says that by such “security” the two parts are adhered, thus providing a seal. To break the seal, tearing is required (P9, L1-8).
- 1e ✓ as shown in Doc B drawing both the flap and the body contains adhesive strip, as well as 1<sup>st</sup> and 2<sup>nd</sup> blobs (which are also adhesives). P8 L26-30 describe that when the flap is secured to the body (by folding along the folding line) then there is an adhesion which are caused by sticky material to adjoin the two parts, see P8, L17-18.
- 1f ✓
- 1g ✓ P8, L5-6 uses the same words “tamper-evident” and its use is to show evidence of tampering, which means once an attempt is made or the envelope is indeed open, there is an indication (evidence). P9, L3-4 also explains using the color-changing blobs as the tamper-evident means.
- 1h ✓ the first blob is shown in the drawing on the left-hand side of the flap portion near its end. This is in consistence with the definition of “located at or towards” in claim 1 since P9, L1-3 says that to open the envelope the first blob has to be overcome first, which suggests that the first blob is at the side of the flap where tear starts.

Therefore, claim 1 is infringed by “No-peek” envelope.

#### Claim 2

- 2a ✓      2b ✓ Although the slits in Doc B extend from the wide side of the flap, the wide side is still a side of the flap so the slits “found either side” in claim 2 are found here. Note that the slits are additional tamper-evident means than the blobs.

Therefore claim 2 is infringed.

#### Claim 3

- 3a ✓ since 1 → ✓; 1+2 → ✓
- 3b X there is no perforated line in Doc B which has holes/slits at intervals

Therefore claim 3 is not infringed.

#### Claim 4

- 4a X      4b X Since there is no perforated line in Doc. B, not mentioning the line of weakness and that it extends along a major portion. Therefore claim 4 is not infringed.

#### Claim 5

- 5a ✓      5b ✓ On both the flap and the body in Doc B there are adhesive strips. The continuity is shown in Doc. B drawings. Note that the two strips have similar length as they suppose to contact each other (see P8, L17-18). The strip on the flap is between the slits, which according to Doc B are separated by  $1/2 \_ 2/3$  of the length of the flaps (see P8, L14-15). Even though it is described as such I think it suffices for "acrossing most of a portion" since  $2/3$  would be a substantial dimension over the length. Therefore, claim 5 is infringed.

#### Claim 6

- 6a ✓      6b ✓ This is explicit from P9, L15-16. Therefore, claim 6 is infringed.

**MARKS AWARDED 11**

### **Novelty**

#### Novelty

Both Doc C and D are old documents published earlier than filing date of Doc A, so they are fully citable for novelty and inventive step.

Document C as a basis for novelty:

#### Claim 1:

- 1a X Although cardboard, paperboard (P11, L34), as well as paper (P12, L15) are all mentioned, there is no indication of the basis weight in Doc C that is required by claim 1.
- 1b ✓
- 1c ✓ the envelope contains front and back panels 11, 12, as well as end closure flaps 14, 15. These parts can be adhered together (P12, L9-11) to form the envelope, which can be used for placing content therein (P11, L6). In this way a pouch portion is formed.
- 1d ✓ See fig. 1. Also, P12, L2-3 mentions the closure flap 18 foldably attached to the top edge along a score line 19 (this is an error, the correct numeral is not shown in Fig. 1).

Flap 18 can be used for sealing the pouch portion, see Fig. 3 the closed state, and that the flap 18 needs to be "lifted up" from the rear panel 12 in an attempt

to open the envelope, which is to say that the flap 18 seals the envelope (see P12, L33-34).

- 1e ✓ See P12, L9-11, the adhesive can be applied to either the flap 18 or the rear panel 12, and as mentioned in 1d, the flap 18 can be secured to the rear panel 12 (i.e. the pouch portion) by folding the flap 18 along the folding line (see P12, L2-3). The flap 18 is then facing the rear panel 18 as it requires “lifting” to separated the two.
- 1f ✓
- 1g ✓ This is the subject of Doc. C to provide an envelope with tamper-evident means (see P11, L1-3) (P11, L7-9), P12 L5-6 describes the selective pattern of slits as the tamper-detecting means. P12 L33-37 describe the irreversible indication (by slits connectors to be severed and subpanels adhered to the rear panel)
- 1h ✓ As shown in Figs 1-2 and 4, some slits extend along two different inclined directions A, B from the long edge of the flap 18. These are at least parts of all the slits. The long edge of flap 18 fulfills definition of “either side” in claim 1.

Therefore claim 1 is not anticipated by Doc C, since in 1a the Doc C does not disclose “lightweight”.

#### Claim 2

- 2a X      2b ✓ As shown in Fig 4, there are many pairs of elongate continuous slits extending from the edge (the bottom edge of flap 18) in Fig. 4.

Claim 2 is not anticipated by Doc. C

#### Claim 3

- 3a X      3b ✓ in Fig. 4, any extended long line constituted by slits 23/25 are considered as a perforated line (since either holes or slits will suffice)

Claim 3 is not anticipated by Doc. C.

#### Claim 4

- 4a X      4b ✓ the perforated line is actually formed by slits, but in any event they “together form” a line of weakness which are susceptible to being fractured (see P12, L30).
- 4c X the claims requires “a” line, so there are multiple such continuous lines in Fig. 4. Apparently, none of these lines extend across a substantial dimension of the pouch portion. All the lines together in Fig. 4 may be considered as acrossing the length of the envelope, but a single line simply across only along inclined direction A or B in Fig. 4

Therefore claim 4 is not antecipated by Doc. C

#### Claim 5

5a X      5b ✓ Fig. 2 shows the adhesive strip 22 which is continuous, also see P12 L9-11.

5c ✓ The strip 22 as shown in Fig. 3 across the substantial length of the rear panel, thus the pouch portion.

Therefore claim 5 is not anticipated by Doc. C

#### Claim 6

6a X      6b ✓ See P11, L34 and P12, L14-15

Claim 6 is not anticipated by Doc. C

Document D as a basis for considering novelty:

#### Claim 1:

1a X Nowhere in Doc D talk about the weight or even the material of the envelope. The feature of "lightweight" is not disclosed although an envelope is clearly disclosed, see P15, L2-4.

1b ✓

1c ✓ it is called "casing" or "pouch" in Doc. D, see P17, L11

1d ✓ P17, L11-13 and L30, the edge 5 is a "hinge axis" which means that the flap 4 is able to rotate relative to the pouch 2 although they are joined together. The flap 4 is used for sealing the envelope, see P16, L15-17.

1e ✓ Same as 1d, see P16, L15-17 in which adhesive is contained on the flap 4 or the cover 2 and these two are secured (due to sealing).

1f ✓

1g ✓ the frayable portions 10 are provided as tamper-evident indicator (see P16, L29-34 and L15-22).

1h ✓ the frayable portions 10 can be provided at free edge of the flap (P16, L30). The free edge 4C is shown in Fig. 1.

The portions 10 are therefore located at a side of the flap portion.

Therefore claim 1 is not anticipated by Doc. D

#### Claim 2

2a X      2b X although slits are disclosed (P17, L33-34), it is used to replace the cut-out, which is not part of the tamper-evident means.

Therefore claim 2 is not infringed.

Claim 3

3a X            3b X although there is disclosed a weakened line 9 which showed as a perforated line, it is not part of the tamper-evident means according to Doc. D

Therefore claim 3 is not anticipated.

Claim 4.

4a X            4b ✓ As shown in Fig. 2, the notches 9 and perforated line 8 form a continuous line. However, the notch 9 maybe replaced by slits (P17, L33-34)

Claim 4 is not anticipated

Claim 5

5a X            5b ✓ this is shown as bonding region 6 in Figs 1-2

Claim 5 is not anticipated.

Claim 6

6a X            6b X there is no indication of material in Doc. D.

Claim 6 is not anticipated.

**MARKS AWARDED 16**

**Inventive Step**

Inventive Step:

Applying windsurfing/pozzoli test:

①a the person skilled in the art is a designer/manufacturer of paper OR envelope. The client himself is only interested in paper market but somehow he took part of the envelope design in Doc. A.

①b the common general knowledge includes P3, L2 of Doc A, and Doc C (since it is widely used all over Ep so assuming that it is well-known by the industry). By comparison, Doc D is probably not part of CGK since it is a patent and never commercialized, thus not familiar to skilled person)

② the claims have been constructed above

③ and ④ :

Claim 1: Both Doc C and Doc D disclose most of the features in claim 1 except for the "light weight material". However, as Doc C is CGK the paper, paperboard or cardboard blank disclosed in Doc C should be well-known.

This will include the lightweight paper mentioned in Doc A and recited in the claim 1. Those skilled in the art starting from either Doc C or Doc D should be able to think of using the lightweight paper to make envelopes. There is no

indication in Doc A as to the relationship between all remaining features of claim 1 and the lightweight paper material. In fact, Doc A admits that the use of lightweight paper is just a “preference” (see P3, L16-19) and even lighter paper may be used although it is not “usually suitable”. In addition, Doc. A admits that heavier paper may also be used (see P4, L6-7). All the above clearly shows that the use of lightweight paper is just a design choice which requires no creative labour. As there is nothing teaching away from using a lightweight paper in Doc C or D, claim 1 seems to not involving an inventive step.

Besides, both Doc C and D disclose various tamper-evident means on the envelope located near a side of the flap, including slits and weakened lines, as well as frayable portions. The key features recited in claim 1 are therefore nothing new.

Therefore, claim 1 does not involve an inventive step.

#### Claim 2

Claim 2 mainly deals with the pair of elongate slits. However, such slits are disclosed in Doc C. Doc C also mentions that the notch 9 at the edge of the flap can be replaced by slits.

Claim 2 unlikely to involve an inventive step when the slits in Doc C and D are readily available to skilled persons.

#### Claim 3

Claim 3 is similar to the case of claim 2 that a perforated line itself is clearly disclosed in Doc C. Claim 3 is obvious to skilled persons in the art.

#### Claim 4

Claim 4 is about the continuous line of weakness together formed by the slits and perforated line. This is however disclosed in Doc. C. Doc. C does not mention that such continuous line across a major portion of the pouch, but those skilled should easily think of this modification since the entire region of slits in Doc 4 performs the same function. Doc. D also shows a continuous line formed by perforated line and slits

Claim 4 is therefore uninventive.

#### Claim 5

Claim 5 is mainly about the continuous strip of adhesive across the major portion of the envelope. This is explicitly disclosed in Doc. C. Claim 5 unlikely to be considered as inventive.

Claim 6 is not inventive since Doc. C as CGK teaches about using all three materials.

**MARKS AWARDED 9**

### **Sufficiency**

Sufficiency:

1. In claim 1 “the flap” at line 5 lacks antecedent basis. Should be changed to “the flap portion”
2. Claim 4 when depends on 1+3 contains no antecedent basis for “the continuous slits”. Suggest changing claim 4 to depend on claim 3 when depending on claim 2.
3. For claim 6, as “lightweight envelope” in claim 1 is construed as made of lightweight paper, claim 6 actually enlarges the scope of claim 1. Suggest delete “paperboard or cardboard”.

**MARKS AWARDED 0**

### **Amendment**

#### Amendment:

To amend claim 1 so that it is novel and inventive, and in the [unclear] read on the “no-peek” envelope, suggest amend claim 1 to incorporate limitations about

“slits extending or located at either edge of the flap portion, wherein the slit is not aligned with the adhesive strip across the major portion of the flap/pouch”

Doc B also has this feature and because of the slit on the two side of the adhesive strip, the blobs will be severed first. None of Doc C and D disclose such a feature.

**MARKS AWARDED 4**

### **Advice**

Advices to client:

1. Claims 1-2 and 5-6 are infringed but they also not involve an inventive step over at least Doc. C.
2. Suggest consulting an expert/skilled person in this field about the inventive step determination, especially about “lightweight” material
3. The ex-employee filed her own patent application, maybe this is a stolen of IP right. Suggest check employment contract/inventorship agreement.
4. No way to extend Doc A patent to other jurisdictions since it is filed a long time ago, no means to claim priority.
5. Can notify Envelopes-4-U about client’s concern and send them the copy of the patent. There is no actionable proceeding for groundless threat since E-4-U is a manufacturer.

6. Amend the claims as mentioned above asap as it takes time and is opposable. Try not to make E-4-U aware of this amendment.
7. Be careful about “No-peek” trademark, avoid using similar trademark for client’s products.
8. Search for E-4-U’s patent to see if it covers client’s own product.
9. No way to take action against E-4-U in other markets because no foreign patent is in place. However, if manufacturing is in UK, then consider using the GB patent to stop it.
10. Filing a caveat at UKIPO for E-4-U patent application.

**MARKS AWARDED 2**