

*Collegio Italiano dei  
Consulenti in Proprietà Industriale*

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**Paper C EQE 2019**

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FÉDÉRATION INTERNATIONALE DES CONSEILS  
EN PROPRIÉTÉ INTELLECTUELLE

INTERNATIONAL FEDERATION OF  
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INTERNATIONALE FEDERATION  
VON PATENTANWÄLTEN

## FILING AN OPPOSITION

- An opposition is filed in the name of **DOMONIA LTD** against **EP3020234 B1** (A1).
- The opposition fee has been paid
- The patent is opposed on the grounds of Art. 100(a) EPC for lack of novelty and lack of inventive step and also on the grounds of Art. 100(c) EPC



## Effective date of the claims of A1

- Claim 1 comprises three alternatives: KeraMa, KeraSi as well as the combination of KeraMa and KeraSi.
- Claim 1-1 (KeraMa), claim 1-3 (KeraSi) and claims 2-5 were both in the priority document and in the application as filed. They are thus entitled to the **priority date** of **14/11/2014**.
- Claim 1-2 (KeraMa and KeraSi) extends beyond the content of the application as filed.
- Claims 6 and 7 as well as [0017] and [0018] of the description relating to these embodiments were not in the priority document and could only be found in the application as filed. Claims 6 and 7 are not entitled to the priority date. Thus the effective date of claims 6 and 7 is the **filing date** of **14/11/2015**.



## PRIOR ART

- **A2, A4, A5 and A6** were published **before the priority date** of **A1** and are thus prior art under **Article 54(2) EPC** for all claims.
- **A3** was published between priority and filing dates of **A1**.
- **A3** is a non-EP application and thus does not form prior art under **Article 54(3) EPC** for claims entitled to the priority date.
- **A3** is however prior art under **Article 54(2) EPC** for claims not entitled to the priority date, namely claims 6 and 7.

## **ESTABLISH ATTACKS TO THE CLAIMS**

- **Grounds according to Art 100a EPC:**
  - Art 52 Patentable inventions (not regarded as inventions)
  - Art 53 Exceptions to patentability
  - Art 54 Novelty
  - Art 55 Non-prejudicial disclosures
  - Art 56 Inventive step
  - Art 57 Industrial application
- **Grounds according to Art 100c EPC:**
  - Subject matter of EP patent extends beyond the content of the application (or parent as filed: Art. 123(2) and/or Art. 76(1))



## CLAIM 1

- Ironing device comprising an aluminium soleplate (1) coated on its ironing side with a Kera type layer, the Kera type layer being a KeraMa layer and/or a KeraSi layer.
- Claim 1 comprises **three** alternatives because of the construction “and/or”:
  - one with KeraMa,
  - one with KeraMa and KeraSi
  - one with KeraSi

## CLAIM 1-1

- Ironing device comprising an aluminium soleplate (1) coated on its ironing side with a Kera type layer, the Kera type layer being a **KeraMa** layer.
- Claim 1-1 defines that a KeraMa layer is the Kera type coating.
- Claim 1-1 is not new on view of **A4**, Art. 54(2).
- Claim 1-1 is thus opposed on the basis of **Art. 100(a) EPC**.



## **NOVELTY ATTACK**

- Basically copy the claim and for each feature explain in parentheses where it can be found in the cited AX and why it is the same (if not indicated by the same word)
- You gain marks for finding the feature (use of information marks), but more importantly for arguing why it is the same feature (argumentation marks)
- In this argumentation you will sometime refer to another Annex, in which the definition is given





## NOVELTY ATTACK

- Generic vs. specific (specific disclosure takes away the novelty of generic disclosure, but not vice versa, e.g., „copper“ vs. „metal“)
- Implicit features – only if there is a strong case (sometimes hinted on by other documents) – do not speculate or overthink, do not use your specialist knowledge
- Equivalence of features, e.g., the fact that polyethylene is a polyalkylene, is always provided in another document



## CLAIM 1-1 OPPOSED UNDER ART. 100(a)

- **A4** discloses in a [4] a prototype dry ironing device comprising an aluminium baseplate, which is a soleplate according to [1] of **A1** (*“the soleplate or baseplate”*) coated with KeraMa.
- The coating of **A4** is a layer according to [6] of **A1** (*“Coating or layer”*).
- It is explained in [3] of **A4** the coating is applied “on the bottom side of the baseplate”, which, as defined in [2] of **A4** “comes into contact with the garment”.
- Therefore, in **A4** the coating is applied on the ironing side of the soleplate as according to claim 1 of **A1**
- The subject-matter of claim 1-1, therefore, is not new in view of **A4**, (Article 54(2) EPC).

## CLAIM 1-2

- Ironing device comprising an aluminium soleplate (1) coated on its ironing side with a Kera type layer, the Kera type layer being a KeraMa layer **and** a KeraSi layer.
- Claim 1-2 has been added during the examination proceedings of **A1** and extends beyond the content of the application as filed, thus contravening Art. 123(2) EPC.
- Claim 1-2 it is opposed on the basis of **Art. 100(c) EPC**.



## ADDED SUBJECT MATTER ATTACK

- Explain why the claim has no basis in the application as filed.
- Compare the text of the application as filed with the text of the granted claim
- If also the relevant of the description has been added after filing, the claim has nonetheless **NO** basis in the application as filed.



## CLAIM 1-2 OPPOSED UNDER ART. 100(C)

- Claim 1-2 has been added during the examination proceedings of **A1** and extends beyond the content of the application as filed, thus contravening Art. 123(2) EPC.
- The feature that the Kera type layer is a KeraMa layer **and** a KeraSi layer is not disclosed in **A1** and it is not directly and unambiguously derivable from the originally filed application.
- Par. [6] of **A1** as filed discloses that the aluminium soleplate is provided with a coating on the ironing side. It is also described that the Kera type coating is particularly suitable for this scope.
- Specific examples of Keratype coatings are listed in par.[6]: KeraTix, KeraSi or KeraMa.
- However, there is no indication in [6] that the Kera type coating may comprise both KeraMa and KeraSi.



## CLAIM 1-2 cont.

- In par.[6] it is described that an intermediate coating could be provided.
- The intermediate coating is Yur56, therefore the combination of KeraMa as Kera type coating and Yur56 as intermediate coating is disclosed in [0007] of A1.
- Nonetheless there is no mention in **A1** about the possibility of providing a coating of KeraMa and KeraSi.
- Thus [6] – [7], which are the only passages in the description of **A1** relating to the nature of the coatings, do not provide a basis for the combination of KeraMa and KeraSi.
- Claim 1-2 therefore contains subject-matter extending beyond the content of the application as filed thus contravening Art. 123(2) EPC and it is opposed on the basis of Art. 100(c)

## CLAIM 1-3

- Ironing device comprising an aluminium soleplate (1) coated on its ironing side with a Kera type layer, the Kera type layer being a **KeraSi layer**.
- Claim 1-3 defines a **KeraSi** layer as the Kera type layer.
- The subject-matter Claim 1-3 does not involve an inventive step over **A4** (Art. 56 EPC).
- Claim 1-3 is thus opposed on the basis of **Art. 100a EPC**



## INVENTIVE STEP ATTACK

1. determine closest prior art (CPA)
  - add reasoning for selecting the CPA
  - Not necessarily the document used for a novelty attack of the independent claim
  - Not necessarily the document having the highest number of features in common
2. mention features in common with the claim
  - similar to a novelty attack
3. determine the difference between claim and CPA
  - In term of object
4. technical effect of that difference
  - as presented in A1





## INVENTIVE STEP ATTACK

5. formulate objective technical problem

- Choose the “macroscopic effect”
- Effect is the same as in the CPA – the OTP is to find an alternative
- No technical effect of the different feature – no OTP

6. combine CPA with another document/disclosure and mention why said document may be considered by skilled person

- Motivation of the skilled person to find the second document (e.g., same field, more general field, neighboring field – why the SP would look there)

7. argue why skilled person is motivated to use solution from said document (could/would approach)

- compatibility of materials, no need for further technical modifications, direct hint in the second document that the solution is generally utilizable, etc

8. Conclusion



## CLAIM 1-3 OPPOSED UNDER ART. 100(a)

- The ironing device of the first test series of **A4 (A4-1)** is the CPA of claim 1-3 because it relates to the same type of devices, namely ironing devices with coated metallic soleplates (as clarified in the title of **A4**).
- **A4-1** deals with the same problem of **A1**: protecting metallic soleplates, as clarified in [6] of **A1** and [3] of **A4**.
- As explained in relation to claim 1-1, **A4-1** describes prototype **dry ironing** device comprising an aluminium soleplate coated with KeraMa or KeraTix coating.
- The subject matter of claim 1-3 differs from the devices described in **A4** in that according to claim 1-3 the coating layer is a KeraSi layer.

## CLAIM 1-3 cont.

- The ironing device of the second test series of **A4 (A4-2)** is **NOT** the CPA of claim 1-3 because the Medur alloy of the soleplate is presented as an essential element providing outstanding compromise between properties and cost.
- The skilled person would be therefore discouraged from modifying this feature. Starting from this embodiment would additionally require removing the intermediate layer of Yur74 because it is not compatible with aluminium.
- **A3** not usable
- Neither **A5** nor **A6** describes a coating
- **A2** describes KeraTix coating having aesthetic purpose
- **NONE OF THEM CAN BE CONSIDERED CPA FOR CLAIM 1-3**



## CLAIM 1-3 cont.

- As explained in [6] of **A1** the technical effect of KeraSi is as for the other Kera type coating listed in **A1**, is to protect the ironing side of the aluminium soleplate from deterioration.
- As disclosed in [3] of **A4** the coatings on the ironing side of the soleplate of **A4** achieve the same effect of protecting the metal of the soleplate.
- There is no additional technical effect achieved over the ironing devices of the first test series of **A4-1**.
- The **OTP** of claim 1-3 is therefore to provide **an alternative** protective coating on the ironing side of the aluminium soleplate.

## CLAIM 1-3 cont.

- The skilled man desiring to provide an alternative coating for the ironing side of the aluminium soleplate would consider the ironing devices of **A4-2** since the tests relate to protective coatings of metallic soleplates.
- In [07] and in Table 2 of **A4-2** it is disclosed KeraSi as an example of protective coating.
- The skilled person would thus replace the Kera coating of the first test series by a KeraSi coating without problem.
- This replacement does not require any further modification of the ironing device of the first test series, since the intermediate coatings Yur52, Yur54, Yur56 or Yur58 disclosed in **A4-1** are compatible with Kera type coatings as explained in [6] of **A4**.

## CLAIM 1-3 cont.

- Therefore the skilled man would obtain the coating of claim 1-3 without exerting an inventive skill.
- Therefore the subject-matter claim 1, third alternative, does not involve an inventive step over **A4** (Article 56 EPC).



## **CLAIM 1-3 CONSIDERATION**

- **Why A4-1 + A4-2 is different from A4-2 + A4-1?**
- [7] defines Medur alloy as “essential element”
- Intermediate coatings YurXX are not indicated as essential elements
- **What about the sentence of [8] A4 “KeraSi is not compatible with steam because it rapidly corrodes”?**
- **Do we care about this sentence?**



## CLAIM 2

- Ironing device according to claim 1 being a **steam iron** wherein the coating on the ironing side of the soleplate (1) comprises, starting from the soleplate (1) in this order, a **Yur56 layer** and a KeraMa layer as the Kera type layer
- Claim 2 defines a **KeraMa** layer as the Kera type layer and defines that the ironing device is a steam iron.
- The subject-matter Claim 2 does not involve an inventive step over the combination of **A2** with **A4** (Art. 56 EPC).
- Claim 2 is thus opposed on the basis of **Art. 100(A) EPC**



## CLAIM 2 – cont.

- **CLOSEST PRIOR ART**
- **A2** is the closest prior art of Claim 2 because it relates to a **steam iron** and comprises a soleplate with **three materials**, therefore requires the least structural changes for arriving to the object of Claim 2.
- **A2** also deals with the same purpose as claim 2 of having lightweight irons (**A1** [5] and **A2** [2]).



## CLAIM 2 – cont.

### CLOSEST PRIOR ART

- **A3** not usable; **A5** relates to a press;
- **A4** relates to dry irons and the heating element should be modified for allowing the passage of steam, and **A6** [1] explains that steam irons have a design which is completely different from dry irons;
- **A2** and **A6** relate both to steam iron but the soleplate of A6 is made of Prex200 and cannot be coated (see [6] of **A6**).

## CLAIM 2 – cont.

- **A2** discloses a steam iron (claim, title or [1]) with a soleplate made of a low density metal ([3]).
- The soleplate is coated in this order starting from the soleplate with a Yur56 layer and a KeraTix layer ([14] “apply first a layer of Yur56 and then a layer of KeraTix”).
- The coating is on the ironing side of the soleplate since [14] refers to the aesthetically appealing glossy finish of the KeraTix coating.



## CLAIM 2 – cont.

### DISTINGUISHING FEATURES

The subject-matter of claim 2 differs from this known device in that

- 1) the baseplate is an aluminium baseplate (**A2** discloses that the baseplate is made of a low-density metal but does not specify the type of metal) and
- 2) the Kera type layer is a KeraMa layer.



## CLAIM 2 – cont.

TE of 1<sup>st</sup> DIFF. is according to [5] of **A1** to allow the production of a lightweight iron. This is already achieved with the generic low density metal of **A2**, as explained in [5] of **A1**.

The OTP of the first difference is how to provide a specific lightweight iron.

TE of 2<sup>nd</sup> DIFF is to improve gliding, as disclosed in [6] of **A1**. Better gliding eases ironing, as confirmed e.g. in **A4**, [2].

The OTP of the second difference is to ease ironing.



## **CLAIM 2 – cont.**

- There is no synergistic technical effect achieved by the two distinguishing features taken in combination, but rather a plurality of partial problems which are independently solved.
- Consequently, the inventive activity related to the two different partial problems can be separately assessed (GL, G-VII, 5.2 or 6).



## **PARTIAL PROBLEMS APPROACH**

- Allows to combine more than 2 documents for PSA
- When there are 2 (or more) differences between the CPA and the attacked object
- Comes up very often
- Basis: if the differences solve different problems which do not have anything in common (i.e., there is no synergy between the effects), they can be treated separately



## **PARTIAL PROBLEMS APPROACH**

- Determine the differences from the CPA
- For each difference, determine effect
- Argue why the effects are independent, i.e., why there is no synergy or cooperation between the effects
- Determine the OTPs, treat the OTPs separately, i.e., continue with a separate PSA for each difference





## CLAIM 2 – cont.

Starting from **A2** and desiring to solve the second technical problem the skilled person would look at **A4** as it deals with problem of making the ironing easier. ([2] of **A4**)

Table 1 of **A4** shows the gliding properties of the irons of the first test series.

Gliding properties are better with a KeraMa layer than with a KeraTix layer.

The skilled person would thus replace the KeraTix layer of the iron of **A2** by a KeraMa layer.



## CLAIM 2 – cont.

In order to solve the first partial problem, the skilled person would look at **A4**, because it discloses soleplates coated made of low density material.

[4] of **A4** discloses in the first test series irons having a soleplate made from aluminum.

The solutions provided in **A4-1** to BOTH partial problems are compatible since they are disclosed in the same embodiment of **A4**.



## CLAIM 2 – cont.

Furthermore this embodiment comprises a Yur56 layer as intermediate layer ([5] and [6]).

The skilled person would choose aluminium as a suitable low density material for making a lightweight iron and replace the KeraTix coating of **A2** by KeraMa without changing the intermediate layer of Yur56.

Therefore, the subject-matter of claim 2 hence does not involve an inventive step over **A2** in combination with **A4** (Article 56 EPC).



## **CLAIM 2 comments**

- Usually the two partial problems are solved with different documents?
- The order of the partial problems can be changed
- **Use the formulation that is easier for you or more logic for the construction of the PSA discussion if they are not equivalent**



## CLAIM 3

- Ironing device according to claim 2, wherein the soleplate (1) comprises **steam outlets** (2) and **grooves** (3) starting from the steam outlets (2) to distribute the steam, and wherein the grooves (3) **are obtainable by low-pressure die casting and forced-air cooling**.
- Claim 3 defines the provision of steam outlets and grooves and clarifies that the grooves may be obtained by low-pressure die casting and force-air cooling.
- The subject-matter Claim 3 does not involve an inventive step over the combination of **A2** with **A4** (Art. 56 EPC).
- Claim 3 is thus opposed on the basis of **Art. 100(A) EPC**

## CLAIM 3 – cont.

- **CLOSEST PRIOR ART the same as for claim 2 for the same reasons**
- **A2** is the closest prior art of Claim 3 because it relates to a **steam iron** and comprises a soleplate with **three materials**, and also discloses a soleplate provided with grooves.
- Therefore **A2** has the most features in common with the object of claim 3 and requires the least structural changes for arriving to the object of Claim 3.



## CLAIM 3 – cont.

- **A2** discloses in [13] a steam iron with open channels 26, which fulfil the definition of A1 [9] of grooves (*“grooves i.e. open channels..”*).
- The open channel of **A2** start from the steam outlets 25, as shown in figure 2, [11] or [13] of **A2**.
- **A2** also discloses a sole plate having a layer of Yur56 and KeraTix.
- In [14] of **A2** it is explained that this configurations is applicable with the “above embodiments”, which implies that the coated metallic soleplate disclosed in [14] can be used any embodiments and thus also for the 2<sup>nd</sup> embodiment, provided with open channels.

## CLAIM 3 – cont.

- Hence **A2** discloses a steam iron with **grooves** starting from the steam outlets and a **low density** metallic soleplate coated on its ironing side with first a **Yur56** layer and then a **KeraTix** layer.
- **A2** does not disclose grooves obtained by low-pressure die casting and forced-air cooling as according to claim 3. **A2** discloses in [12] that the soleplate with the grooves is made by counterpressure die casting at a press of 4 bars, followed by air cooling.
- Thus the process of claim 3 is not the same as the process known from [12] of **A2**



## CLAIM 3 – cont.

- This feature of claim 3 is a product-by-process feature. According to GL F-IV, 4.12 or T150/82 a product claim is not rendered novel merely by the fact that it is produced by a different process.
- **A1** does not disclose any specific product property linked to the claimed process, the only advantages being in terms of ease of implementation ([10]).
- **A3** which was filed on 08/08/2013, is not prior art for claim 3 but refers in [7] to methods available for some years, hence before the priority date of 14/11/2014 of A1.



## **CLAIM 3 – cont.**

- The method defined in claim 3 and the method used in **A2** are mentioned in [7] of **A3**.
- This passage indicates that “the microstructure of the metal and thereby its properties are exclusively determined by the forced air-cooling”.
- **A3** is indirect evidence for this factual information even if **A3** was published after the effective date of claim 3.
- **The methods of claim 3 and of A2 having in common forced air-cooling hence lead to soleplates with grooves having the same microstructure.**

## CLAIM 3 – cont.

- A groove formed according to the method of claim 3 cannot be distinguished from a groove made by the method of **A2**.
- Consequently the product-by-process feature of claim 3 is not a distinguishing feature.
- The differences between the subject-matter of claim 3 and **A2** are the same as for claim 2, thus the same reasoning as for claim 2 applies.
- There is no hindrance in applying KeraMa on top of the grooved soleplate because **A2** [14] discloses compatibility between Kera type coatings and structured metallic soleplates.
- The subject-matter of claim 3 hence does not involve an inventive step over **A2** in combination with **A4** (Article 56 EPC).

## GRAZIE PER L'ATTENZIONE

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