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Impact.
Passion.
IP.

IP Akademie

Workshop Claim Drafting

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BUNDESGERICHTSHOF



“If the patent, when viewed objectively, falls short of the technical content of the invention, the protection is limited to what can still be related to the meaning of its patent claims”

„Bleibt das Patent bei objektiver Betrachtung hinter dem technischen Gehalt der Erfindung zurück, beschränkt sich der Schutz auf das, was noch mit dem Sinngehalt seiner Patentansprüche in Beziehung zu setzen ist.“

Federal Court of Justice, decision of March 12, 2002 - X ZR 135/01 (Schneidmesser II)

Motivation



“The name of the game is the claim”

Original source: Giles Sutherland Rich, Extent of Protection and Interpretation of Claims-American Perspectives, 21 Int'l Rev. Indus. Prop. & Copyright L. 497, 499 (1990)

Motivation



- Author of the claim(s) is responsible for the scope of protection
- Patent Attorney's prime task to draft claims that
 - have good chances of being allowed in various jurisdictions

AND

- provide the right scope of protection for up to 20 years

I. A first example

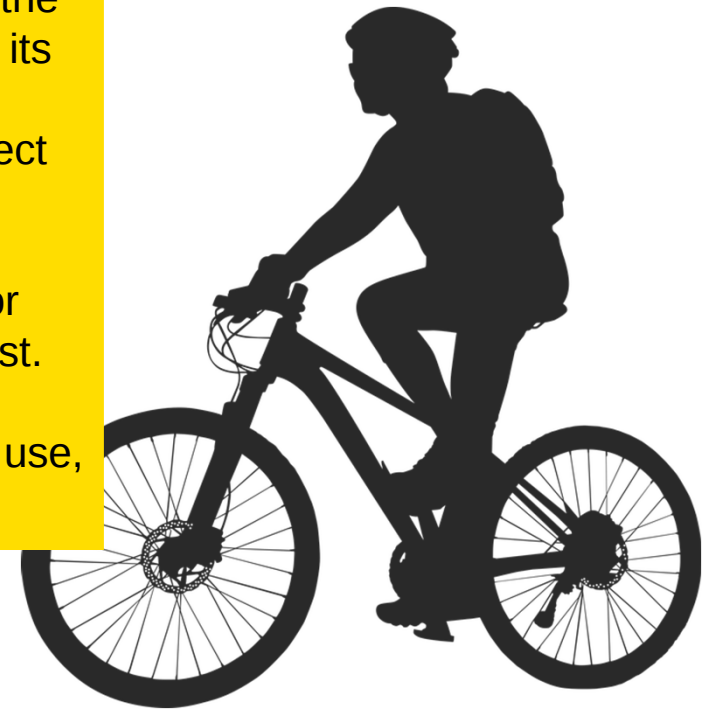


The inventor's story

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I have developed a new bike. My new bike is the best one I've ever had, it has two 29 inch wheels, each having 32 spokes. It is much better than the one I had before, with the 27 inch wheels, each having 30 spokes. And its look is gorgeous, it is green with a silver-colored bell. The old one was painted in blue. Also, my new bike has a gel-padded seat which is perfect for long rides.

I realized that for downhill rides, I want to sit in a higher position than for uphill rides. I did not want to get down each time to change the seat post. Therefore, I added an electrically adjustable seat post, which allows to adjust the height of the seat to five different positions. It is very easy to use, by means of two buttons on the handlebar.



The Claim

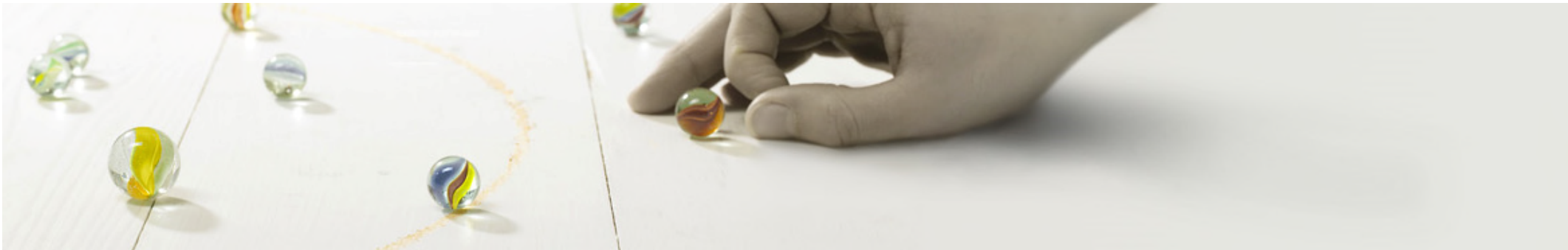


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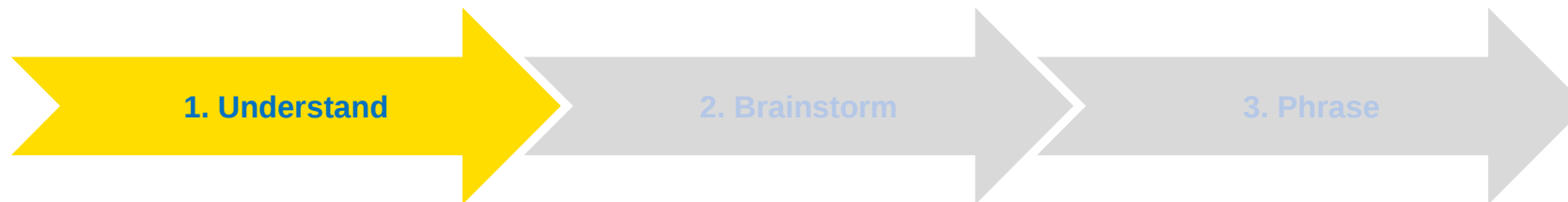
1. A green bike characterized in that it comprises a frame and two 29 inch wheels, each having 32 spokes, the bike further comprising a silver-coloured bell, and a gel-padded seat on top of a seat post, the seat post has five different positions for its height, and changing between the positions is very easy by means of two buttons on the handlebar.

- Which mistakes do you see?
- How would you improve the claim?

II. The approach to claim drafting



How to write an independent claim



1. Understand the invention

- Do not think about how to protect it
- Focus on what the inventor explains to you
- What was known in the prior art and how did the inventor improve this solution?

How to write an independent claim



2. Brainstorm

- For each feature, look for narrow and broad terms
 - *container truck* → *truck* → *utility vehicle* → *vehicle*
 - *screwed on* → *non-rotatably attached* → *fixed* → *arranged*
 - *Cl* → *halogen*
- Try to build and interconnect elements
 - *lever arm arranged on a base plate*
 - *a column having a-hollow top portion*

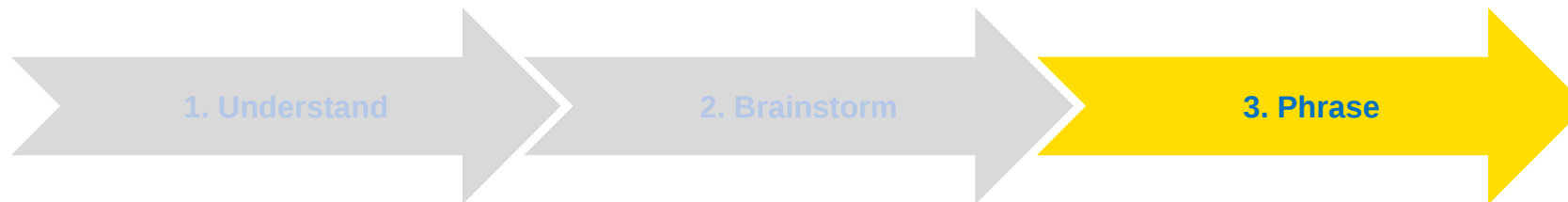
How to write an independent claim



2. Brainstorm

- Think about the (sub)set of features that properly specifies the invention
 - An independent claim should be directed to the smallest entity
 - If the invention resides in the *engine*, claim the *engine*, not the *car*
 - If the invention is an improved *hinge*, claim the *hinge*, not the *cupboard*

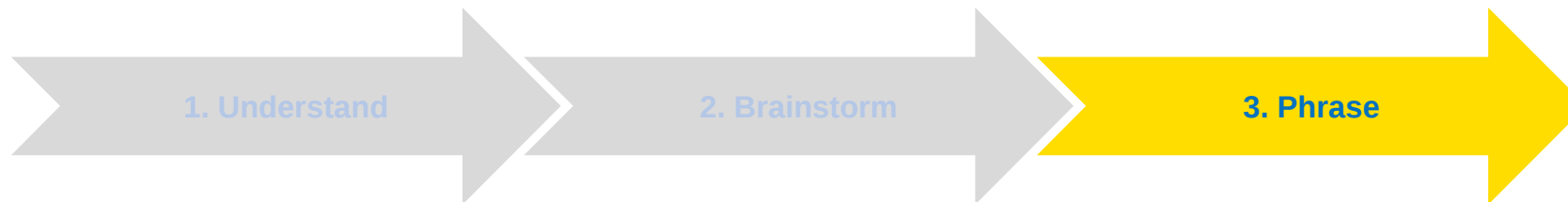
How to write an independent claim



3. Try to phrase an independent claim

- Take the smallest entity found and start your claim with said entity
 - *An engine comprising...*
 - *A hinge comprising...*
 - *A method for producing pictures including ...*
- Use the broadest terms and the interconnected elements to come up with a full sentence
 - *An engine comprising*
 - *an inlet for fuel,*
 - *a compressor configured to compress the fuel, and*
 - *a combustor chamber for combustion of the compressed fuel.*

How to write an independent claim



3. Try to phrase an independent claim

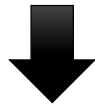
- Iterative approach
- Once you have a claim, check it against the prior art as well as possible design around solutions.
- Revise, revise, revise,...

The scope of protection achieved by the claim

The more elements you have in the claim, the narrower the scope of protection



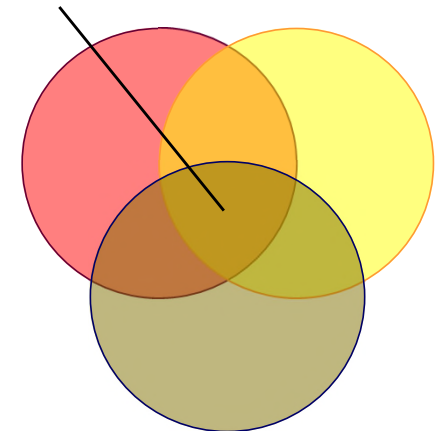
The claim requires at least one element to distinguish the claimed subject matter over the prior art



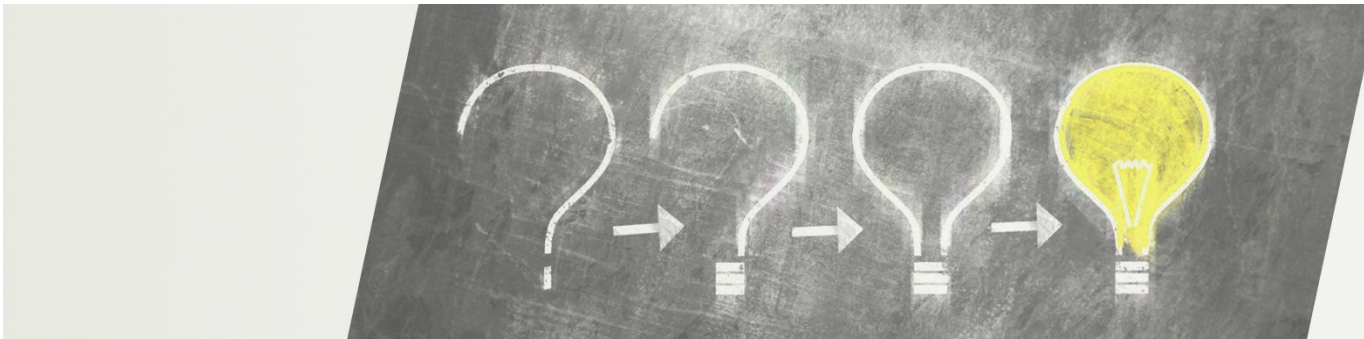
Independent Claim = Prior Art + one (or more) new feature(s)

Remember: Define the prior art as concise as possible

Scope of protection of features **A+B+C**



III. Exercise 1



The inventor comes to your office...



I am a passionate football player. I have never made it to a professional level, but I really enjoy playing as a goalkeeper. I am a musician by profession, and play the piano. Unfortunately, my hobby and my profession do not really match well. Sometimes, when we have a football match and my defense doesn't play well, I have to catch so many balls that my fingers get overstretched. During the next days, I can't play the piano well.

I have tried various goalkeeper gloves that are currently available. Here are some pictures of the type of gloves that goalkeepers currently use.



The currently available gloves



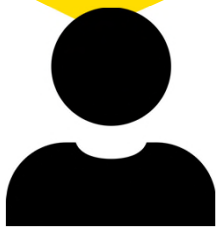
Some of the gloves are made of a more rigid, less flexible material. This is helpful as it protects the fingers against over-stretching. However, at the same time, it becomes more difficult to bend the fingers. This makes it also more difficult to safely catch balls.



The inventor continues...



One morning, I had the idea that it should be possible to produce reinforced gloves without these disadvantages. I tried various things, and came up with a new glove. My new glove protects the fingers against overstretching, while at the same time each of the fingers has the ability to bend freely. I have prepared various drawings, which I can use to show you how my invention works:



The inventor's embodiment (1)

34, 38: webbed areas for further stabilization

24: elongated rigid elements

20: series of small plastic blocks

18: finger joints

D: finger area

C: metacarpus area

B: wrist area

Fig.1

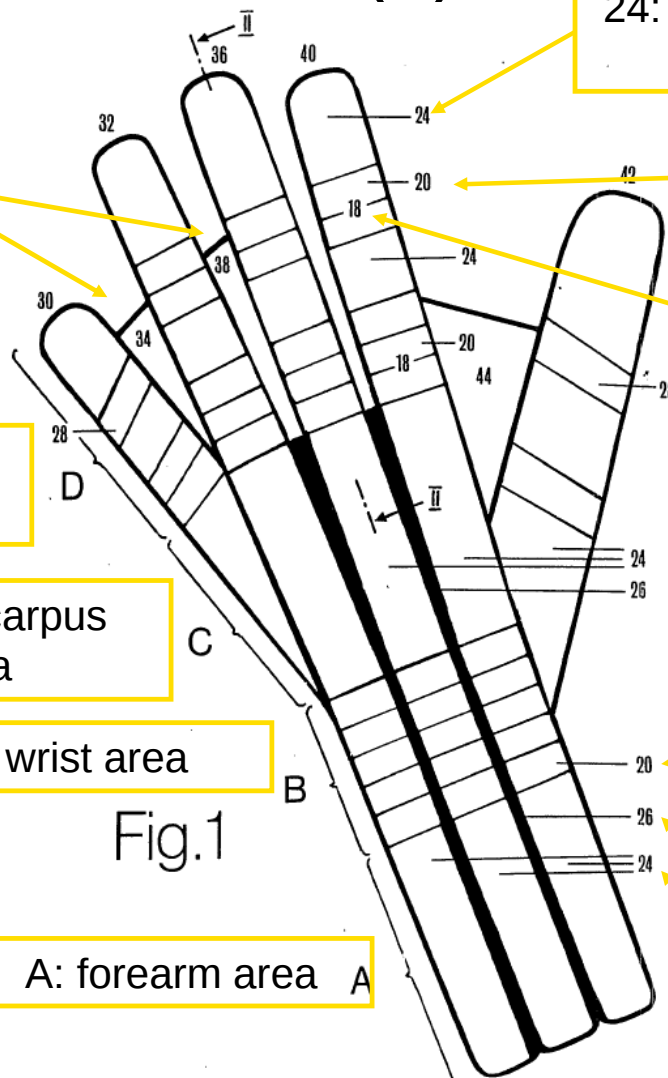
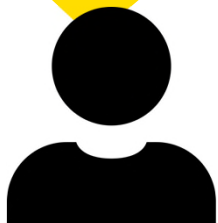
A: forearm area

20: series of small plastic blocks

26: longitudinal intermediate spacings

24: elongated rigid elements

Fig. 1 shows a rear view of my new glove:



The inventor's embodiment (2)

Fig. 2

б.

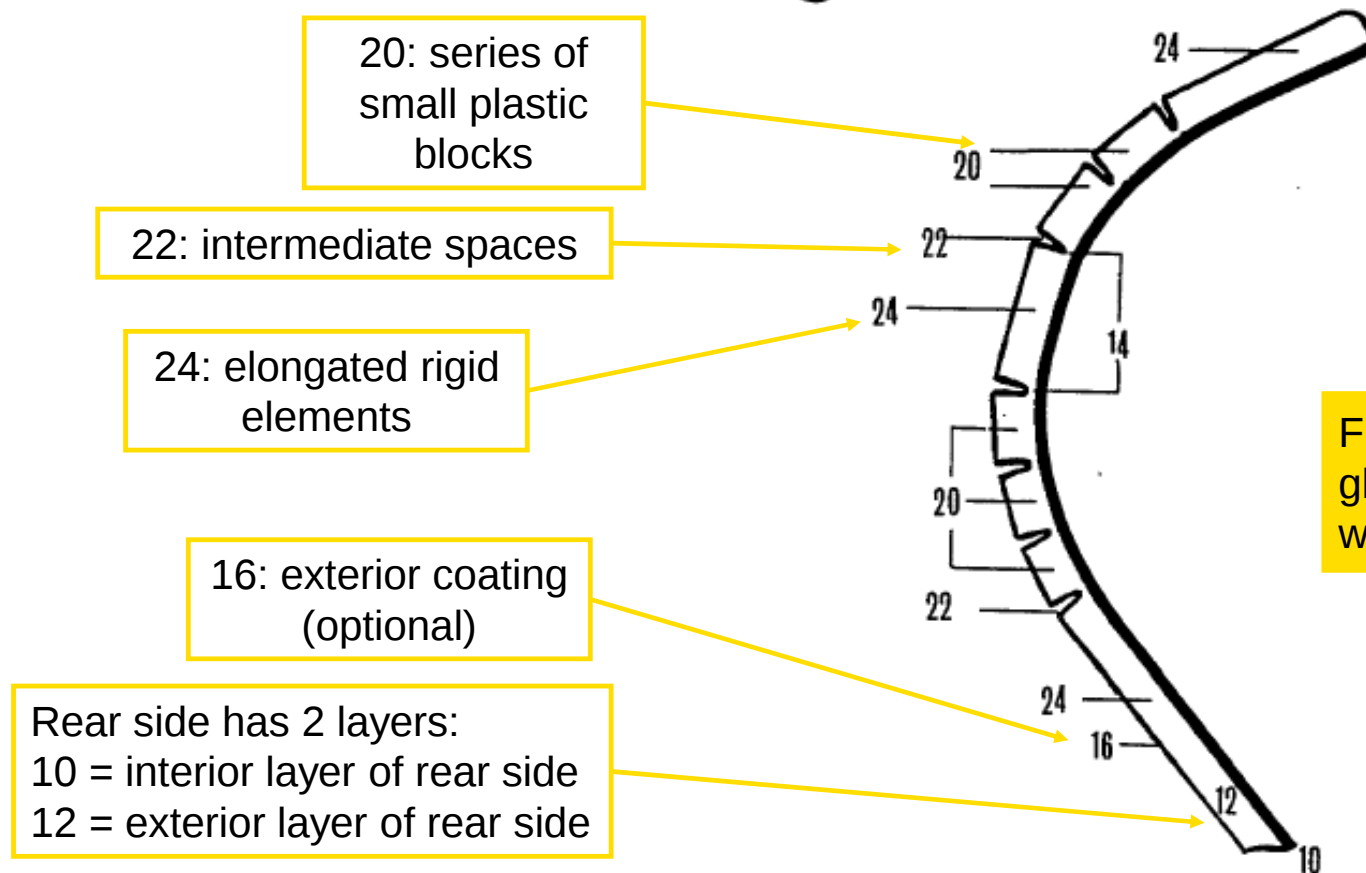
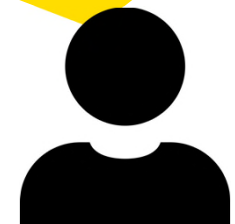


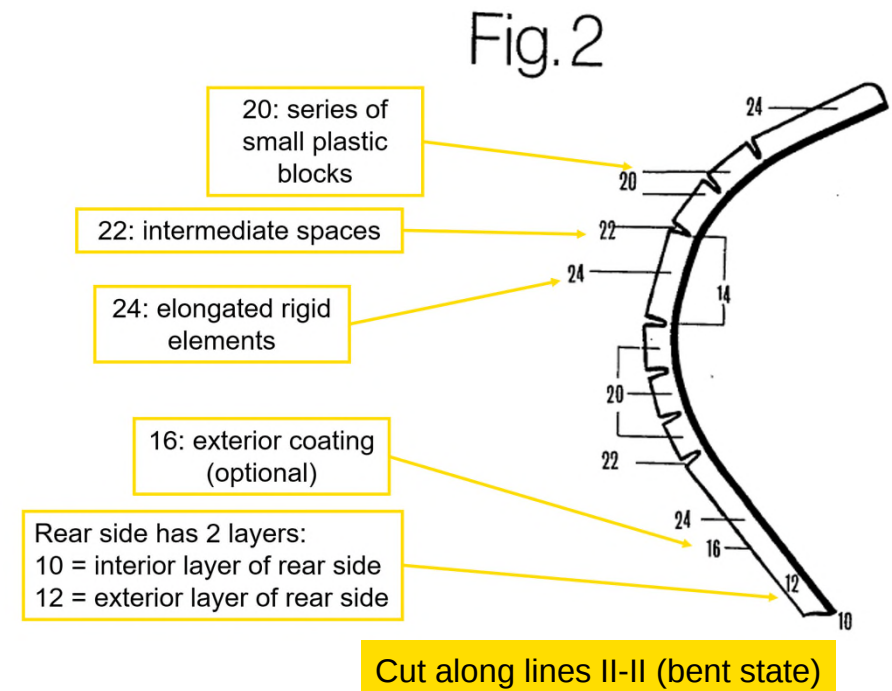
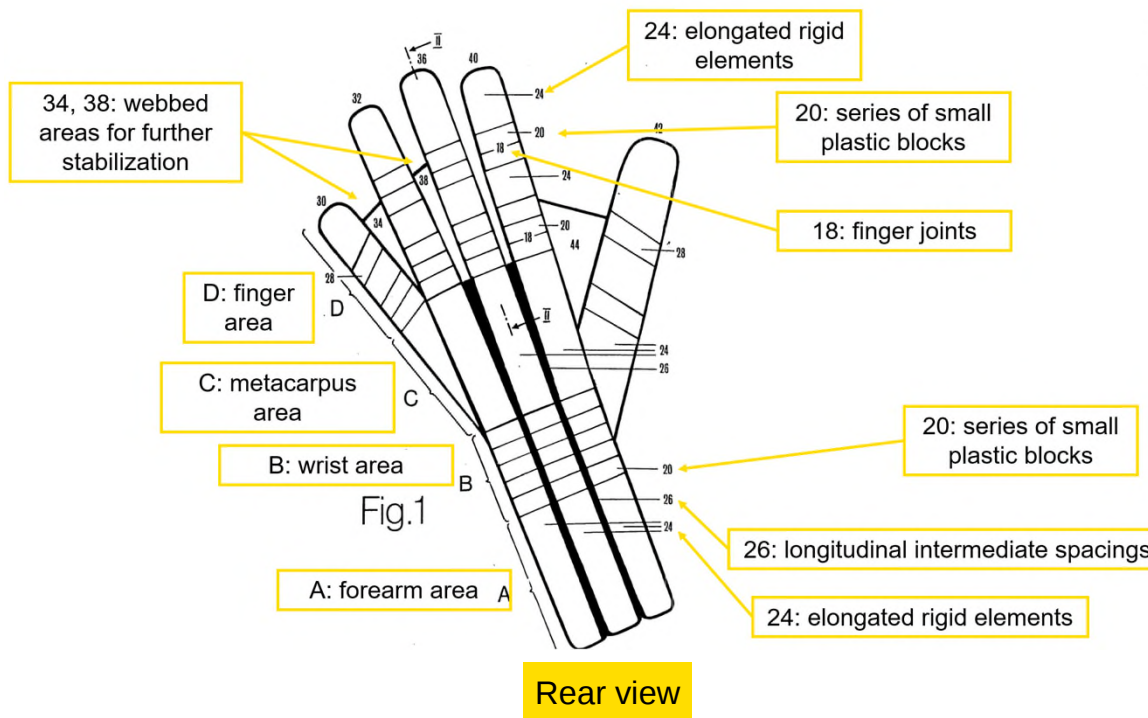
Fig. 2 shows a cut of the new glove along the lines II-II of Fig. 1, with the finger in its bent state:



Your Task

Please draft

- one or more independent claims
- (optional) various dependent claims



Claim 1 as granted (slightly adapted)

1. A glove,

(a) in particular goal keeper glove,

(b) comprising a glove rear surface consisting of two layers of material,

characterized in that

(c) in at least certain areas of the glove rear surface, the interior material layer (10) is essentially tension-proof, but flexible,

(d) and the exterior material layer (12) consists of essentially pressure-resistant elements (20) that are arranged in series in longitudinal direction,

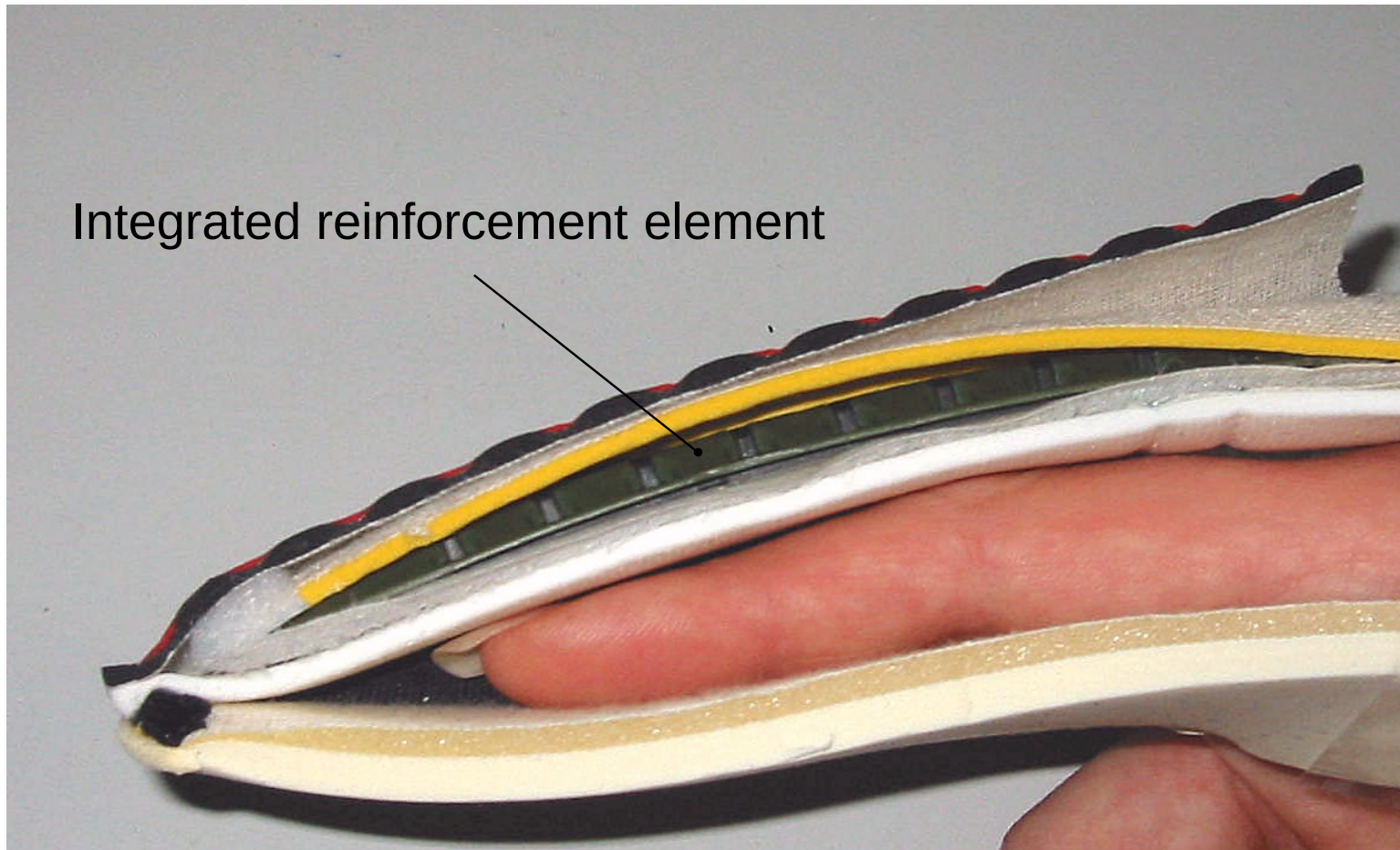
(e) wherein said elements (20) are arranged on the interior material layer (10) such that they blockingly collide shortly before the extended position of the glove.

→ What do you think of this claim?

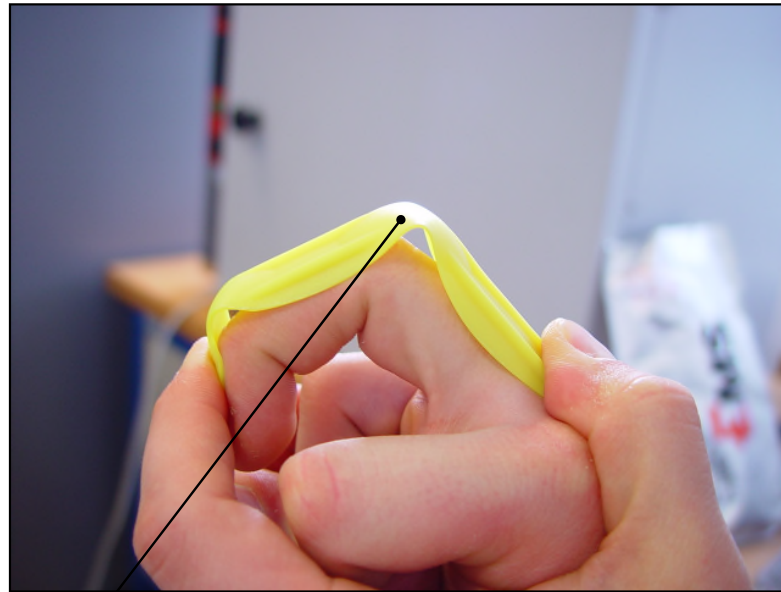
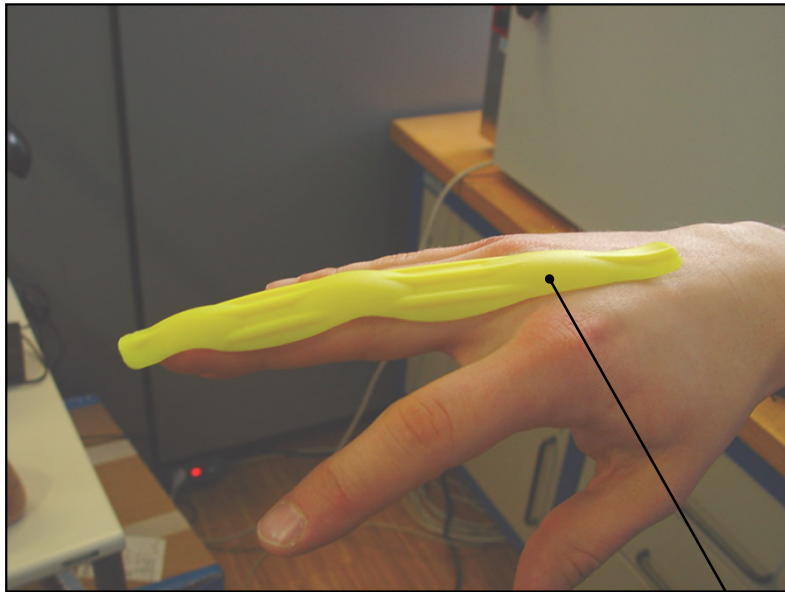
→ Any problems?

Design Around Solutions (1)

Б



Design Around Solutions (2)

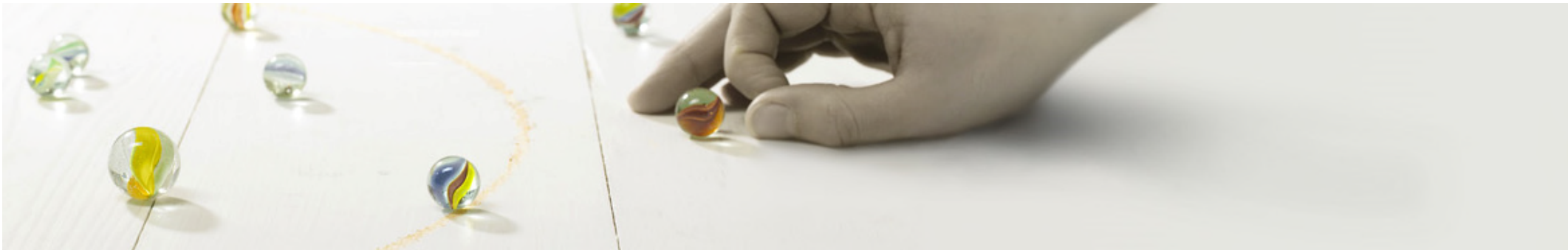


Integrally-formed (one-piece) reinforcement element

Suggested Claim 1

1. *A reinforcement element for protection of a finger or a wrist against overstretching, said reinforcement element comprising*
 - (a) a series of rigid elements (20, 24) arranged in a longitudinal direction,*
 - (b) wherein the reinforcement element is configured to be placed in a bent state and an extended state,*
 - (c) and the rigid elements are arranged such that*
 - (c1) in the bent state, intermediate spaces (22) are formed between the rigid elements, and*
 - (c2) in the extended state, the rigid elements blockingly collide.*

IV. Structure and language of claims



Claim Types/Categories

- Products
 - Physical entities: tools, devices, apparatus, chemical compounds, “kits of parts”, etc.
- Methods
 - Activities: methods of manufacture, methods of analysis, methods of medical treatment, etc.
- (Uses)
 - An activity with a physical entity: use of a chemical compound in the treatment of disease, use of a tool to perform a task, etc.

Independent v. Dependent Claims

- A patent usually contains one or more independent claims.
- Within each claim type/category, the independent claim(s) should comprise only the minimum set of features that is necessary to define the invention over the prior art.
- Each independent claim can be followed by a number of dependent claims that provide further features of the invention.

1. The structure of a claim

- Do not think of a two-part form, start with a one-part form.
- If needed, apply two-part form in the course of examination proceedings
- Use punctuation to assist

A car comprising:

(a) a seat for a driver;

(b) four wheels, each comprising rubber and metal; and

(c) an engine; ...

2. The terminology

- Avoid non-technical features

*A **green** bike...*

- Use consistent terminology

*A **vehicle** comprising at least two wheels, wherein the **bike** further comprises a seat.*

- Use well-defined terminology instead of ambiguous, subjective and relative terms

*A **really fast** car.*

→ A car having an engine configured to power the car to a speed of 200 kilometers per hour.

3. The degree of details

- Use functional language, but don't exaggerate!
- **Avoid “*picture claiming*”!** Do not describe each and every element in the claim in a structural manner
- Think of the functionality related to the feature
 - *electrically height adjustable seat post*
- Mix of structural and functional features is often right
 - If possible, define the “gist” of the invention in a functional matter

4. Mind the wording I

- „consisting“ v. „comprising“: small difference, big impact
- For Europe: “means-plus-function” language for apparatus/device claims
- Think carefully about the meaning of words that are only superficially clear (e.g., "solvent" or "attachment").
 - In case of doubts: define the terms in the description.
- Be careful with wording used by the inventors: double-check if the terms are known in the art.

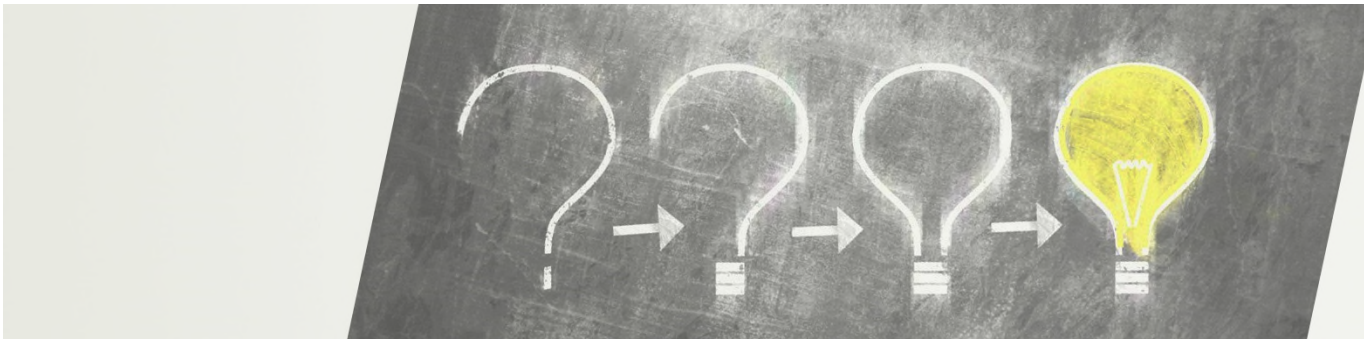
5. Mind the wording II

A ski stick comprising ...

- Functional definitions or definitions of purposes might be hidden



V. Exercise 2



Unlocking a device by performing gestures



Problem :

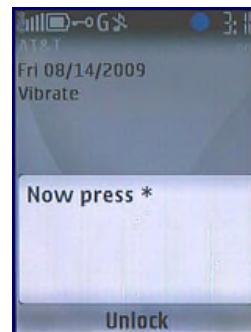
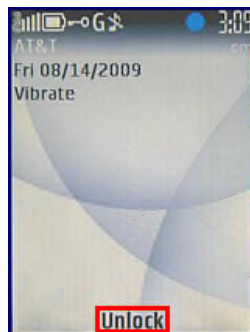
Unintentional activation or deactivation of functions due to unintentional contact with the touch screen of a mobile phone

Unlocking a device by performing gestures



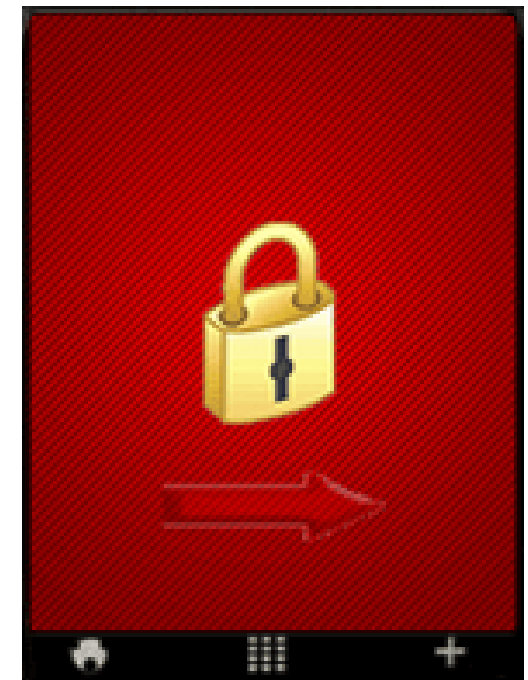
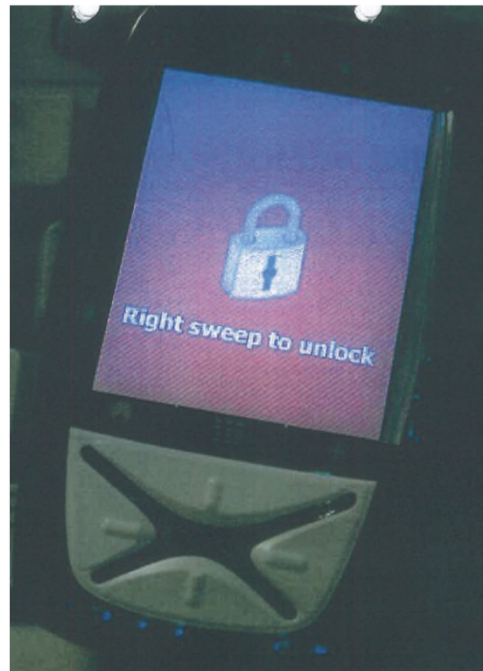
Prior Art 1:

Known unlocking procedures include pressing a predefined set of buttons (simultaneously or sequentially) or entering a code or password. Eg. some mobile phones unlock by pressing menu and * button.



Prior Art 2:

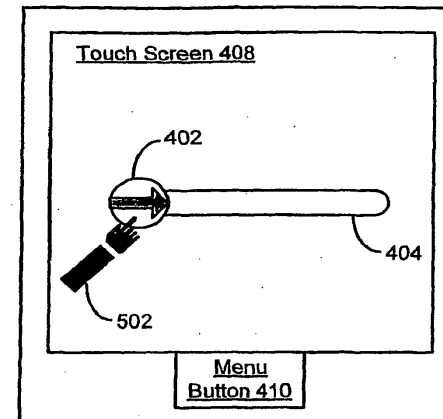
Unlock by sweeping
to the right directly on
the screen



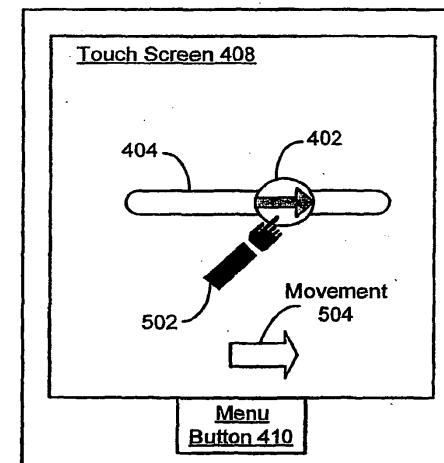
New Solution

- Mobile phone with touchscreen lock state to prevent unintentional use.
- To unlock, the user makes contact at a location displaying an arrow
- The user drags the arrow along a displayed channel, with the arrow moving in accordance with the movement of the finger.

Device
400



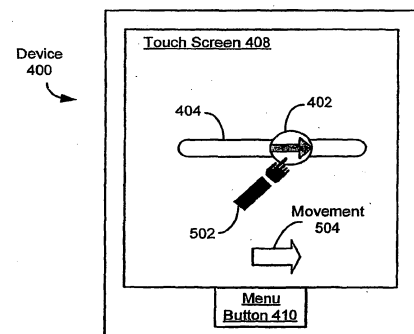
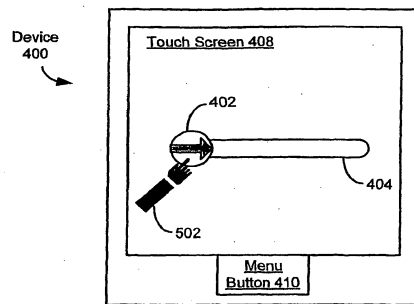
Device
400



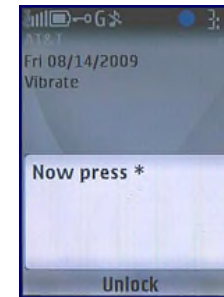
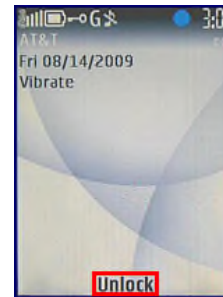
Your Task

Please draft

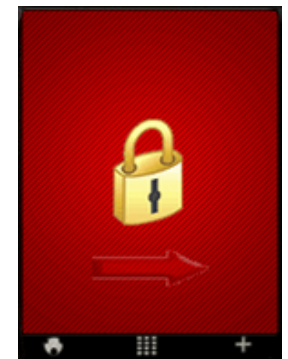
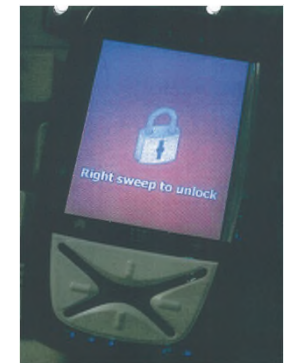
- one or more independent claims.



Invention



Prior Art



Claim 1 as granted (slightly simplified)

1. A method of controlling a portable electronic device comprising a touch-sensitive display, comprising:

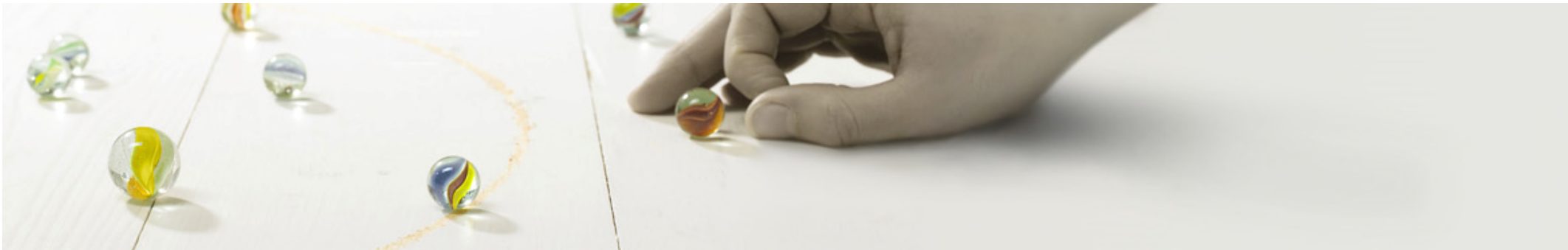
- detecting contact with the touch-sensitive display while the device is in a user-interface lock state;*
- transitioning the device to a user-interface unlock state if the detected contact corresponds to a predefined gesture; and*
- maintaining the device in the user-interface lock state if the detected contact does not correspond to the predefined gesture;*

characterized by

- moving an unlock image along a predefined displayed path on the touch-sensitive display in accordance with the contact.*

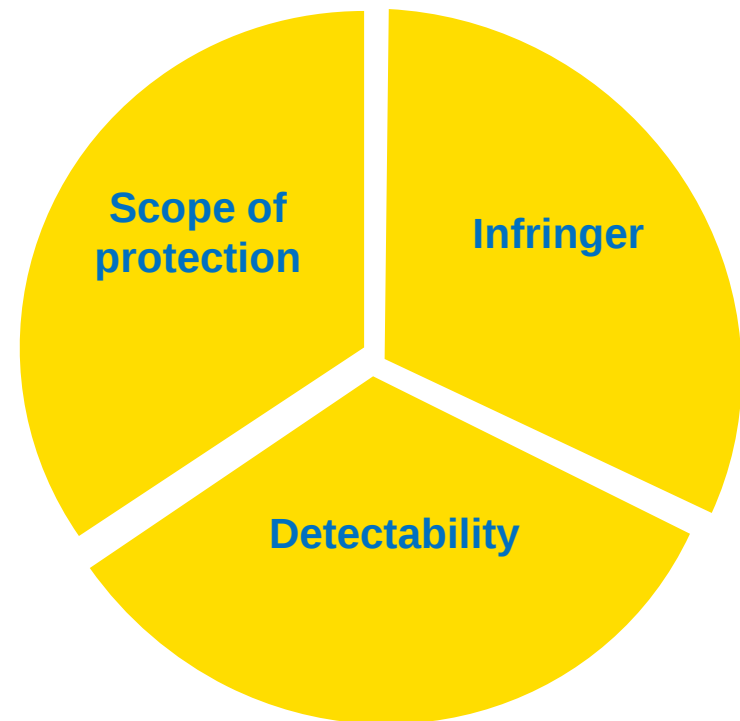
→ What do you think of this claim?

VI. The tests for obtaining strong claims



The three tests for the claim wording

- Scope of protection
 - Is **each and every** feature defined with sufficient breadth?
 - Do you have the right claim categories?
- Infringer
 - Who will be the infringer of your claim?
 - Where will infringement take place?
- Detectability
 - Can you prove realization of **each and every** feature?
 - If not, can you replace the wording?





Thank you very much!

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