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License to Cut: IP in the CRISPR era

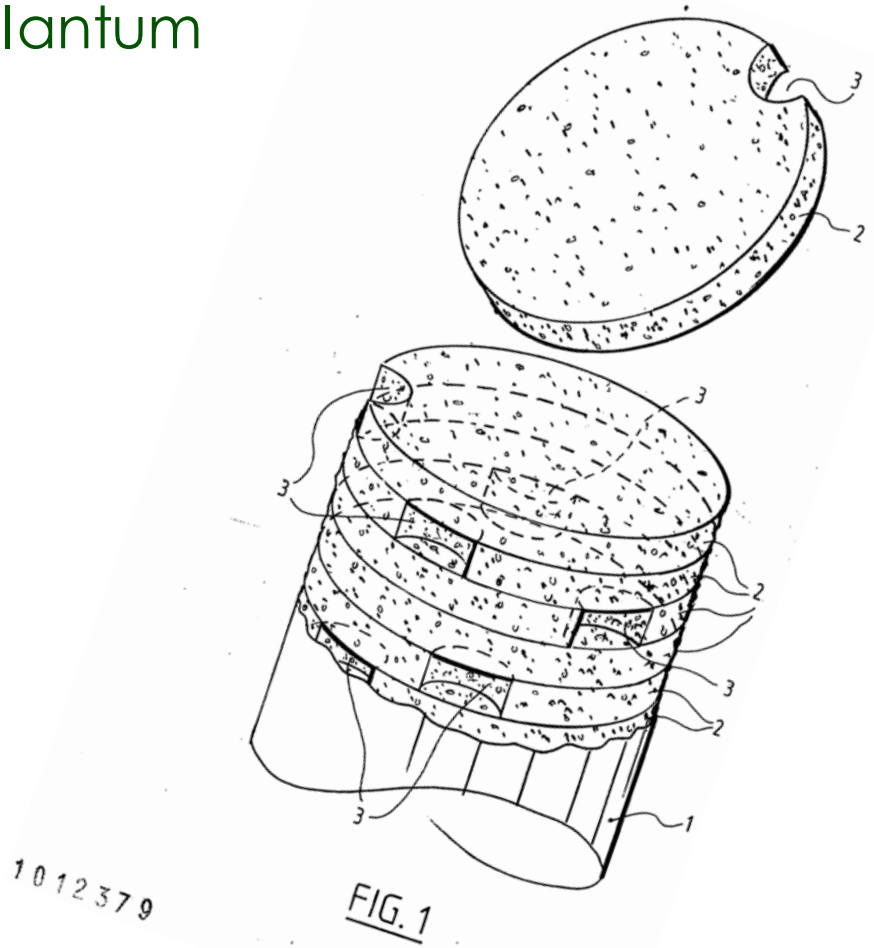


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mr. **Sjoerd Bijl** – legal and IP policy expert at Plantum

Topics

- Patents – a short introduction
- Patenting CRISPR



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Patents – a short introduction



Article 52 EPC,
Patentable inventions

(1) European patents shall be granted for any inventions, in all fields of technology, provided that they are new, involve an inventive step and are susceptible of industrial application.

(2) The following in particular shall not be regarded as inventions within the meaning of paragraph 1:

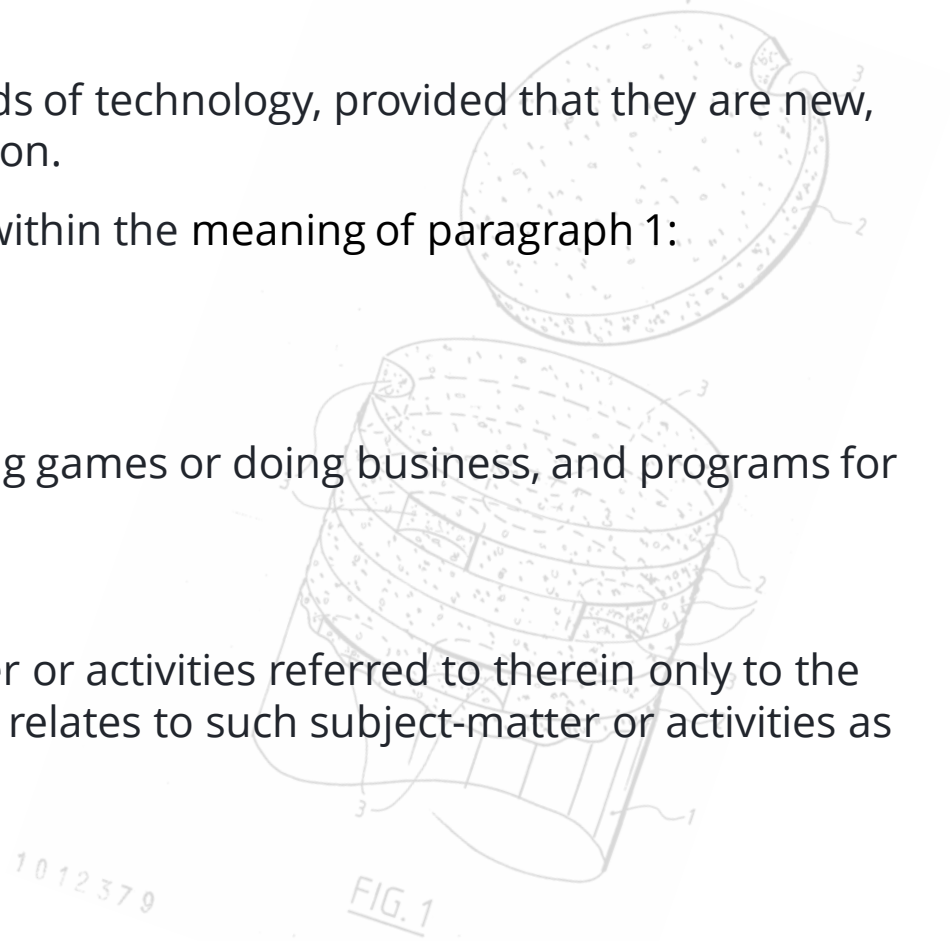
(a) discoveries, scientific theories and mathematical methods;

(b) aesthetic creations;

(c) schemes, rules and methods for performing mental acts, playing games or doing business, and programs for computers;

(d) presentations of information.

(3) Paragraph 2 shall exclude the patentability of the subject-matter or activities referred to therein only to the extent to which a European patent application or European patent relates to such subject-matter or activities as such.



Article 52 EPC,
Patentable inventions

(1) European patents shall be granted for any **inventions**, in all fields of technology, provided that they are **new**, involve an **inventive step** and are susceptible of **industrial application**.

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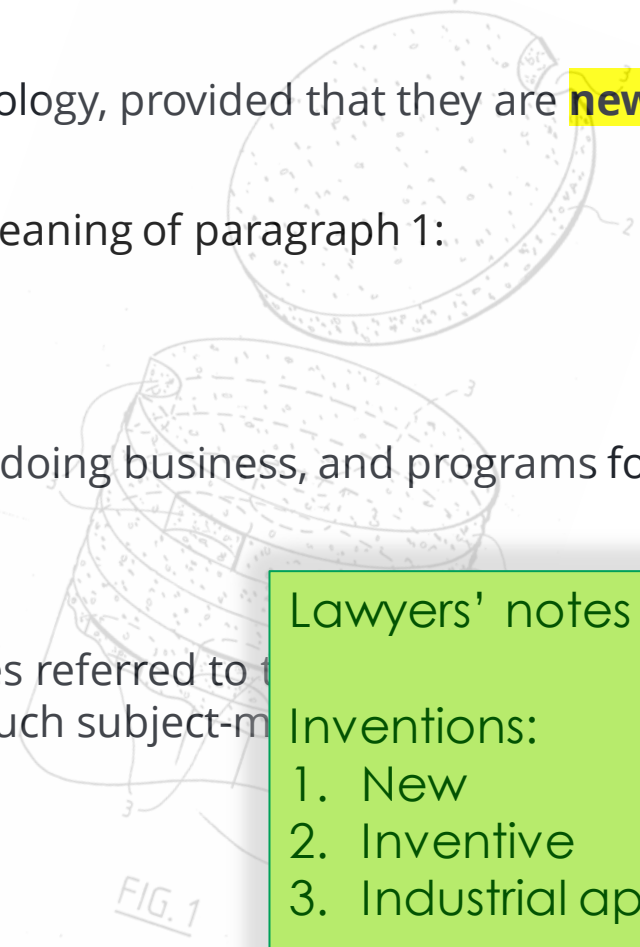
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Lawyers' notes

Inventions:
1. New
2. Inventive
3. Industrial application

But not:
- discoveries

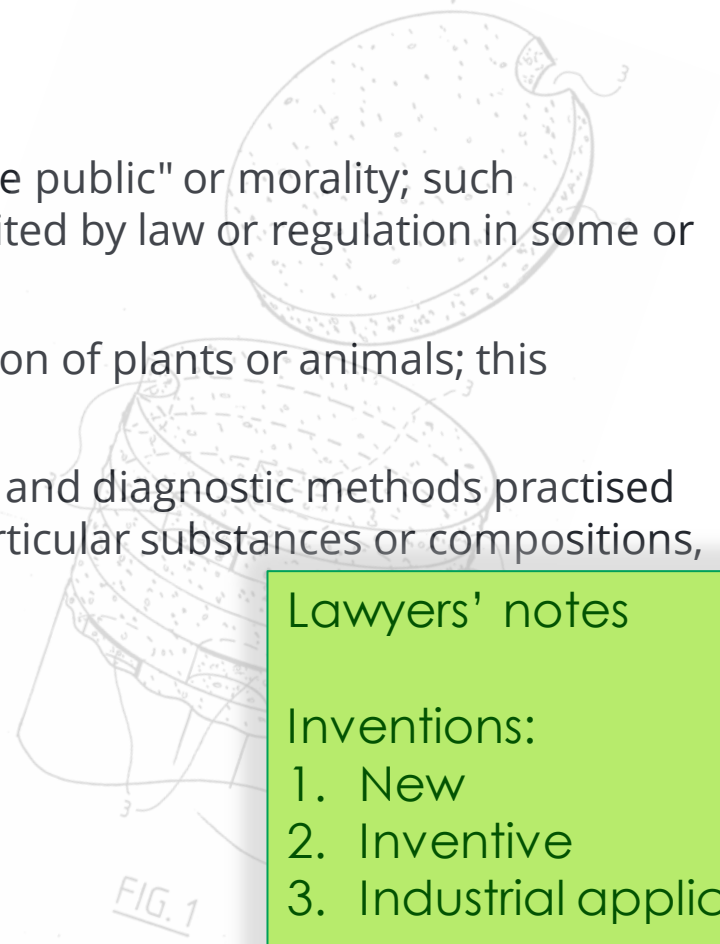
Article 53 EPC,
Exceptions to patentability

European patents shall not be granted in respect of:

(a) inventions the commercial exploitation of which would be contrary to "ordre public" or morality; such exploitation shall not be deemed to be so contrary merely because it is prohibited by law or regulation in some or all of the Contracting States;

(b) plant or animal varieties or essentially biological processes for the production of plants or animals; this provision shall not apply to microbiological processes or the products thereof;

(c) methods for treatment of the human or animal body by surgery or therapy and diagnostic methods practised on the human or animal body; this provision shall not apply to products, in particular substances or compositions, for use in any of these methods.



Lawyers' notes

Inventions:
1. New
2. Inventive
3. Industrial application

But not:
- discoveries

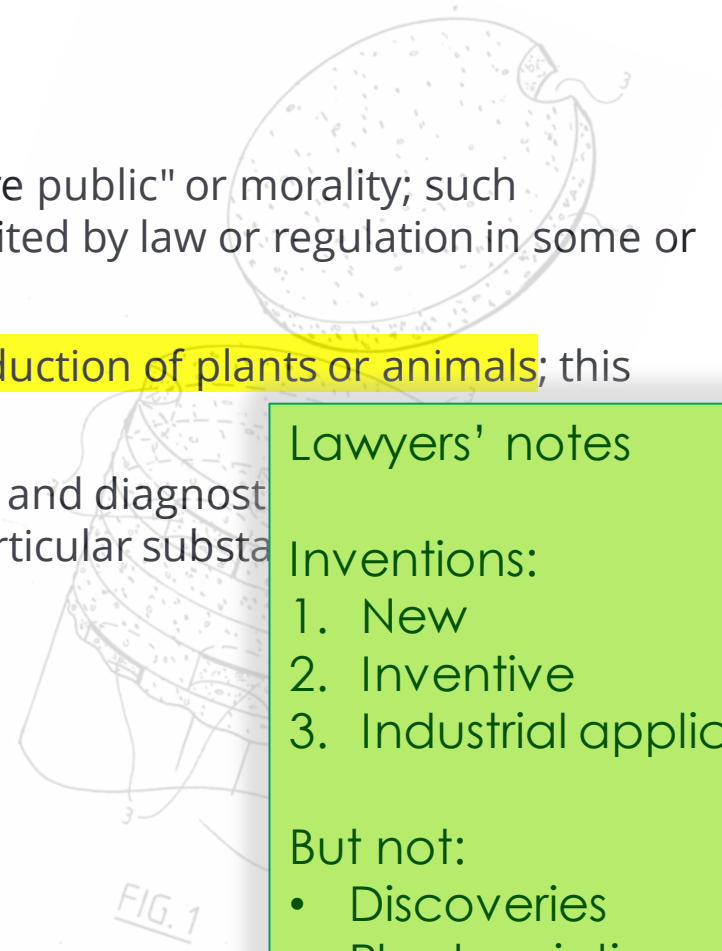
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Lawyers' notes

Inventions:
1. New
2. Inventive
3. Industrial application

But not:
- Discoveries
- Plant varieties
- Essentially biological processes

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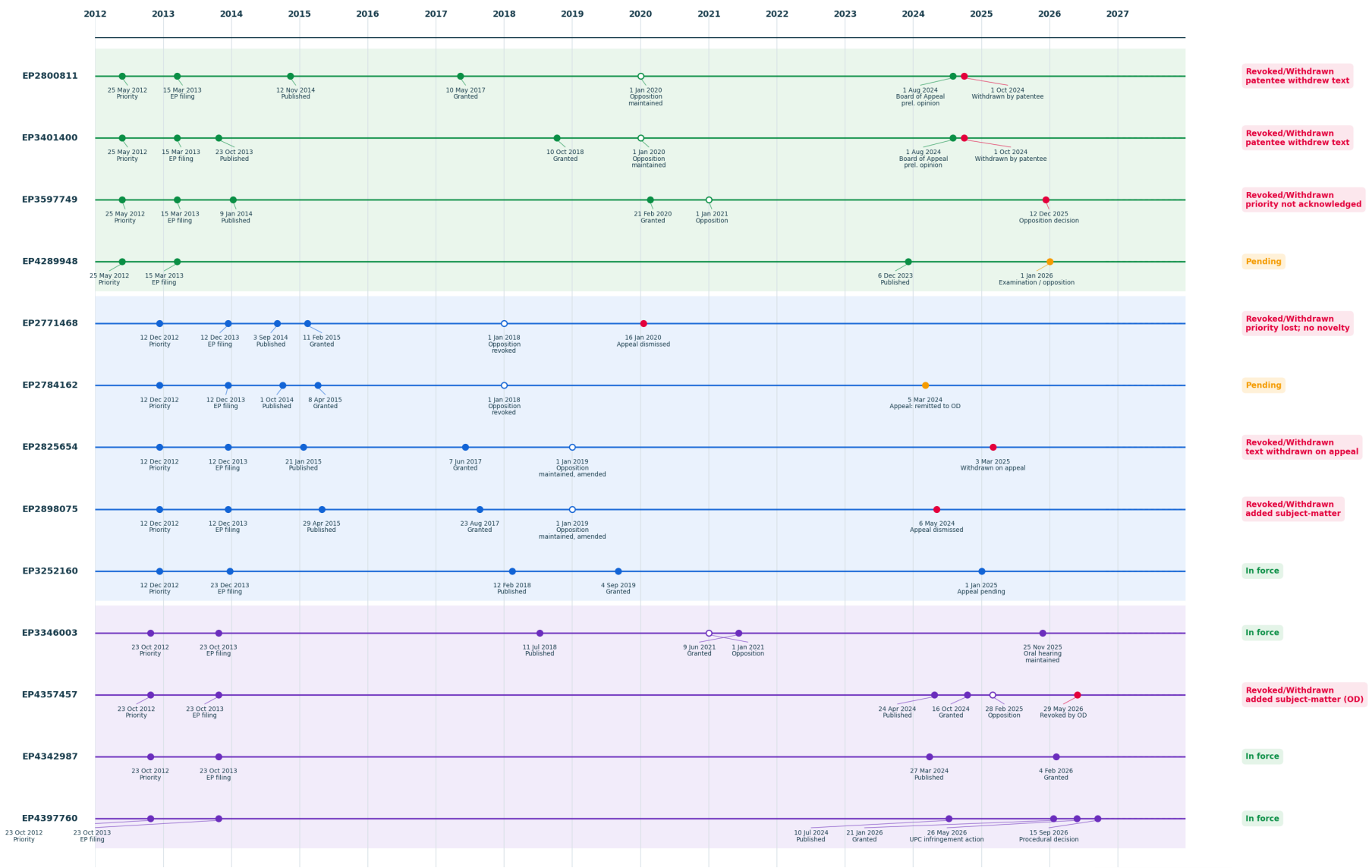
Patenting CRISPR



Plantum PATENTING CRISPR

- Patents on CRISPR tech
  - At least 9 different entities filed for patents on the use of CRISPR in gene editing in 2012
  - Interference- or opposition procedures have been started in most cases
  - In different jurisdictions patents were granted to different entities. Many legal challenges are still ongoing.
  - … and these are just the foundational patents, not including 'thicket' of improved CRISPR-variants.

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Plantum PATENTING CRISPR

- Unclear, so impossible?
  - FTO
  - Multi-licensing
  - Use alternative tech

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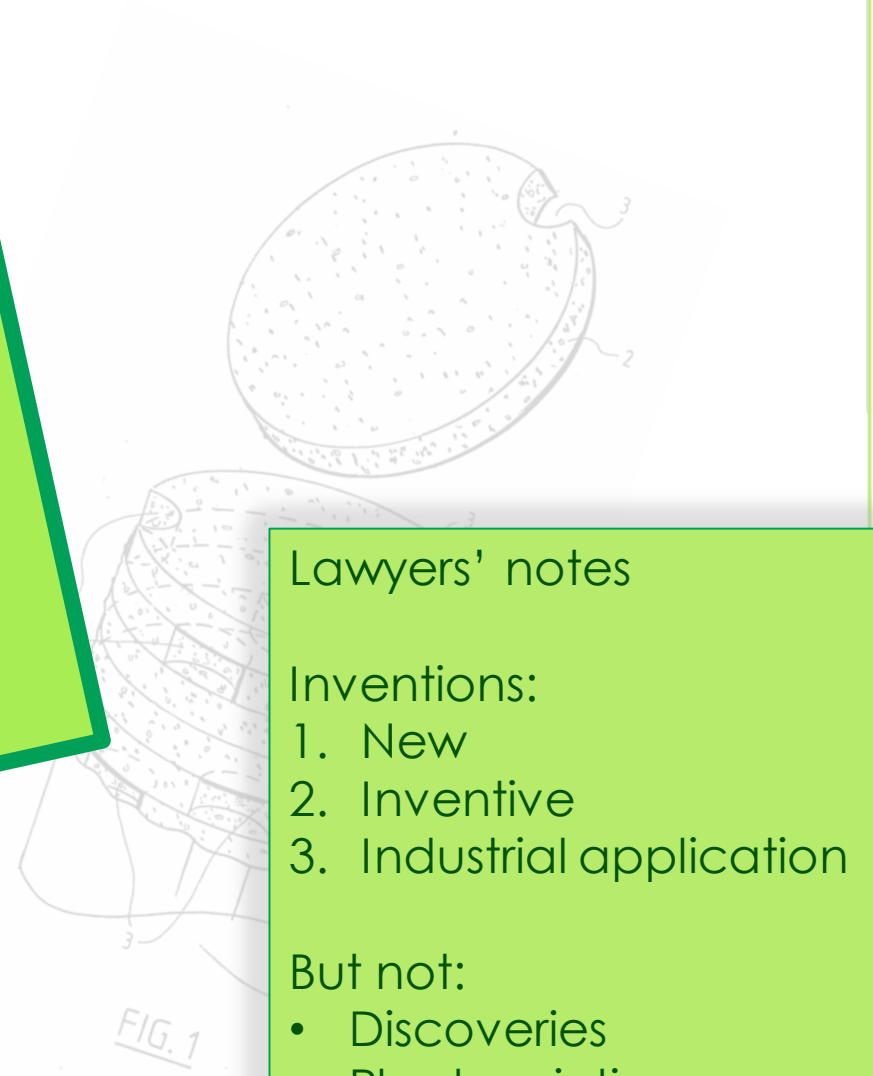
Patenting CRISPR-products



Plantum PATENTING CRISPR-PRODUCTS

- Patents on NGT products
  - Usually obtainable in nature/ by c
    breeding.
    - New?
  - Th
    -
- Paten
  - Rand
    - In
    - In
  - Emula
    - No essentially biological process?

EPO: Sure, why not?



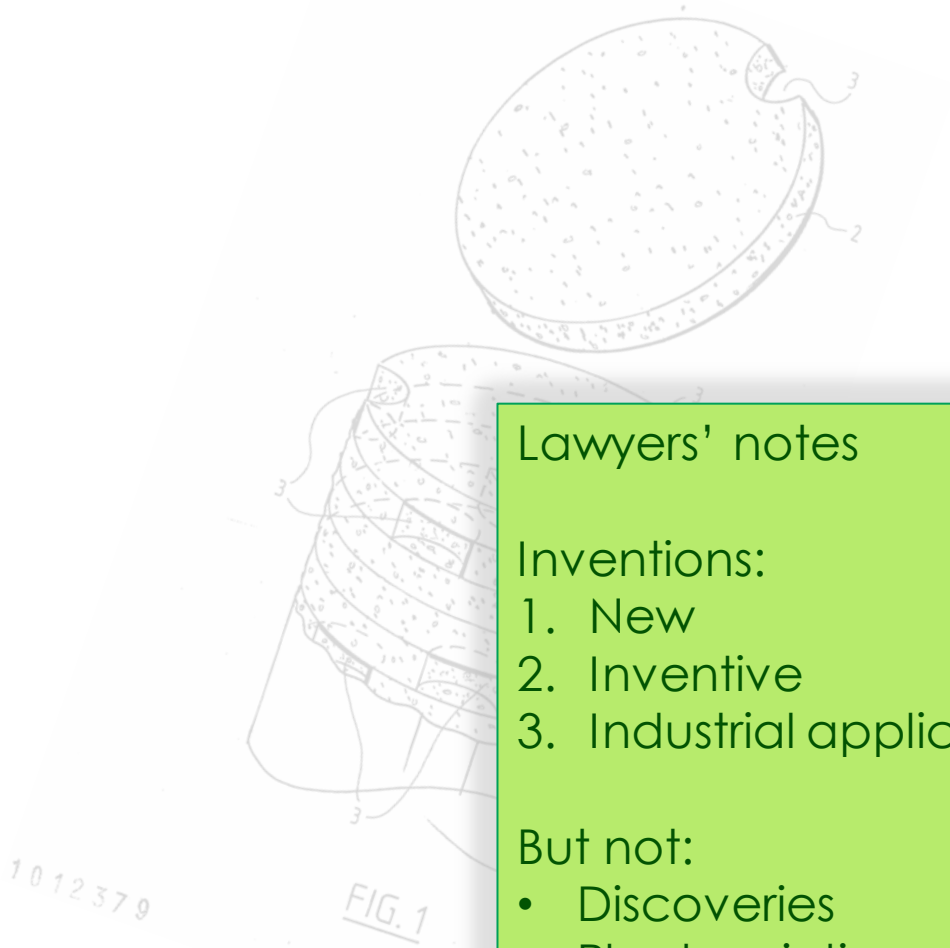
Lawyers' notes

Inventions:
1. New
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But not:
- Discoveries
- Plant varieties
- Essentially biological processes

Plantum PATENTING CRISPR-PRODUCTS

- EU compromise on patents and NGT
  - No patent ban
  - New public database
  - Code of conduct
  - Monitoring by experts



Lawyers' notes

Inventions:
1. New
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But not:
- Discoveries
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Thank you for your attention.

Questions?

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