

# Fundamental Rights, Copyright and Content Recognition (The Good, the Bad and the Ugly?)

*Journée d'étude de l'Association belge pour le droit d'auteur, La transposition de la Directive 2019/790 sur le droit  
d'auteur et les droits voisins dans le marché unique numérique en droit belge*

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# Outline

- Article 17 and the 'Filtering' issue
- Safeguarding Fundamental Rights: From the EU, to the MS, to the service providers
- Technical Aspects of Filtering
- Insights from IPSAM
- Call for action

# Article 17 and the 'Filtering' issue

- Art. 13 DSM Dir. Proposal
  - « *Information society service providers that store and provide to the public access to large amounts of works or other subject-matter uploaded by their users shall, in cooperation with rightholders, take measures to ensure the functioning of agreements concluded with rightholders for the use of their works or other subject-matter or to prevent the availability on their services of works or other subject-matter identified by rightholders through the cooperation with the service providers. Those measures, such as the **use of effective content recognition technologies**, shall be appropriate and proportionate. (...) »*
- Scraped in Art. 17 DSM Dir., but...
- CJEU, *Poland*, C-401/19 (2022)
  - « (...) *in order to be able to carry out such a prior review, online content-sharing service providers are, depending on the number of files uploaded and the type of protected subject matter in question, and within the limits set out in Article 17(5) of Directive 2019/790, required to use automatic recognition and filtering tools. In particular, neither the defendant institutions nor the interveners were able, at the hearing before the Court, to designate possible alternatives to such tools. »* (§ 54)

# Article 17 and the 'Filtering' issue

- The main Fundamental Rights issue :
  - « (...) a **filtering system which might not distinguish adequately between unlawful content and lawful content**, with the result that its introduction could lead to the blocking of lawful communications, **would be incompatible** with the right to freedom of expression and information, guaranteed in Article 11 of the Charter, and **would not respect the fair balance** between that right and the right to intellectual property » (CJEU, *Poland*, C-401/19, (2022), § 86)
  - See also CJEU, *Scarlet Extended*, C-70/10 (2011), § 52; CJEU, *Sabam*, C-360/10 (2012), § 50

# Article 17 and the 'Filtering' issue

- Fundamental Rights in the EU

- Charter of Fundamental Rights

- *'respect for those rights [recognised by the Charter] being a **condition of the lawfulness of EU acts**, so that measures incompatible with those rights are not acceptable in the EU'* (CJEU, Opinion 2/13, § 169)
    - *'situations cannot exist which are covered in that way by European Union law without those fundamental rights being applicable. The **applicability of European Union law entails applicability of the fundamental rights guaranteed by the Charter**'* (CJEU, Fransson, C-617/10, § 21)

- Limitations?

- Art. 52(1) : *'Any limitation on the exercise of the rights and freedoms recognised by this Charter must be **provided for by law and respect the essence** of those rights and freedoms. Subject to the principle of **proportionality**, limitations may be made only if they are necessary and genuinely meet objectives of general interest recognised by the Union or the need to protect the rights and freedoms of others'*

- Conflict between Fundamental Rights?

- *'reconcile the requirements of the protection of different fundamental rights' => 'fair balance'* (CJEU, *Promusicae*, §§ 65-68)
    - Addressees
      - EU institutions when adopting EU law (CJUE, *Deutsches Weintor*, C-544/10, § 47)
      - MS legislator when implementing EU law (CJEU, *Promusicae*, § 68)
      - MS jurisdictions when applying implemented EU law (CJUE, *Deckmyn*, C-201/13, § 32)
      - What about private companies? *See infra*

# Article 17 and the ‘Filtering’ issue

- Art. 17 as a topical exemple of ‘fair balance’ analysis
  - See CJEU reasoning in *Poland*, C-401/19, §§ 59-100

Charter Fundamental Rights EU	Article 17 DSM Directive
<b>Protection of personal data (8)</b>	<ul style="list-style-type: none"> <li>- No general monitoring obligation (8)</li> <li>- No identification of individual users / processing of personal data, except in accordance with GDPR <i>e.a.</i> (9)</li> </ul>
<b>Freedom of expression and information (11)</b> <b>Freedom of the arts and sciences (13)</b>	<ul style="list-style-type: none"> <li>- Autorisation OCSSP shall also cover acts carried out by users (2)</li> <li>- No prevention of legitimate uses, including copyrihgt exceptions (7)</li> </ul>
<b>Freedom to conduct a business (16)</b>	<ul style="list-style-type: none"> <li>- Taking into account features of service, availability/costs means (5)</li> <li>- Taking into account market position (6)</li> </ul>
<b>Intellectual property (17(2))</b>	<ul style="list-style-type: none"> <li>- Extension communication to the public right (1)</li> </ul>
<b>Right to an effective remedy (47)</b>	<ul style="list-style-type: none"> <li>- Complaint and redress mechanism (9)</li> </ul>

# Article 17 and the 'Filtering' issue

- Filters shall « *respect the **essence** of the right to freedom of expression and information* » (Poland, § 76):
  - « *In that regard, it must be noted that the first subparagraph of Article 17(7) of Directive 2019/790 expressly states that the 'cooperation between online content-sharing service providers and rightholders **shall not result in the prevention of the availability of works** or other subject matter uploaded by users, **which do not infringe copyright** and related rights, including where such works or other subject matter are covered by an exception or limitation' of those rights* » (§ 77)
  - « *According to its unambiguous wording, the first subparagraph of Article 17(7) of Directive 2019/790, unlike point (b) and point (c), in fine, of Article 17(4) of that directive, is **not limited** to requiring online content-sharing service providers **to make their 'best efforts'** to that end, **but prescribes a specific result to be achieved*** » (§ 78)

# Article 17 and the ‘Filtering’ issue

- CJEU in *Poland* did not rule out that filters might strike a **‘fair balance’, provided** (among others) that:
  - **‘strictly targeted’** (§ 81)
  - **‘by excluding, in particular, measures which filter and block lawful content** when uploading’ (§ 85)
  - **‘only on condition that the rightholders concerned provide them with the relevant and necessary information** with regard to that content’ (§ 89)
  - **‘services cannot be required to prevent** the uploading and making available to the public of **content which, in order to be found unlawful, would require an independent assessment of the content** by them in the light of the information provided by the rightholders and of any exceptions and limitations to copyright’ (§ 90)
  - **‘procedural safeguards’** (§ 93)
- See also
  - CJEU, *YouTube and Cyando*, C-682/18 and C-683/18, § 102 (« *appropriate technological measures that can be expected from a reasonably diligent operator in its situation in order to counter credibly and effectively copyright infringements on that platform* »)
  - Art. 7 Digital Services Act [Regulation 2022/2065] (‘Voluntary own-initiative investigations’)

# Safeguarding Fundamental Rights: From the EU, to the MS, to the service providers

- CJEU, *Poland*, § 71:
  - « *In addition, the present examination, in the light of the requirements laid down in Article 52(1) of the Charter, concerns the specific liability regime in respect of online content-sharing service providers, as established by Article 17(4) of Directive 2019/790, which **does not prejudge any examination** which may subsequently be carried out in relation to the **provisions adopted by the Member States** for the purposes of transposing that directive or of the **measures determined by those providers** in order to comply with that regime. »*

# Safeguarding Fundamental Rights: From the EU, to the MS, to the service providers

- Stakeholders dialogue (EU Commission Communication, *Guidance on Article 17 of Directive 2019/790 on Copyright in the Digital Single Market*, COM(2021) 288 final)
  - **Technology neutrality**
    - « Article 17(4)(b) should be implemented in a technologically neutral and future proof manner. Therefore, the Member States should not in their implementing laws mandate either the use of a technological solution nor impose any specific technological solutions on service providers in order to demonstrate best efforts. »
    - « (...) online content-sharing service providers should remain free to choose the technology or the solution to comply with the best efforts obligation in their specific situation.
  - **Authorised blocking of ‘manifestly infringing upload’**
    - « (...) preventing the upload by the use of technology, should in principle be limited to manifestly infringing uploads »
  - **Ex post human review for noticed ‘non manifestly infringing uploads’**
    - « (...) other uploads, which are not manifestly infringing, should in principle go online and may be subject to an ex post human review when rightholders oppose by sending a notice »
  - **Information**
    - « Such information could for example include a description of the **type of technologies** (if any) or other means used by the service providers, information on third party technology providers whose services they may use, the **average level of efficiency** of these tools, any changes to the tools/services used (such as possible updates or changes in the use of third party services). Service providers should **not** be obliged to give specific information which would go against their **business secrets**, such as detailed characteristics of the software used, which may be proprietary. »

# Safeguarding Fundamental Rights: From the EU, to the MS, to the service providers

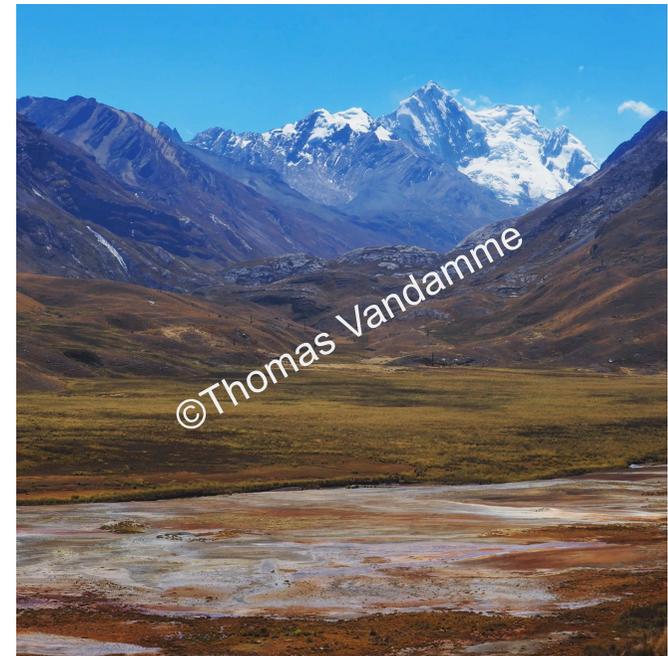
- Belgian implementation, referral to the King (taking into account the stakeholders dialogue)
  - **‘relevant and necessary information’** (*Poland, § 89*)
    - XI.228/5, § 4 CDE: « (...) modalités en lien avec les conditions fixées aux paragraphes 1er à 3, notamment en ce qui concerne la notification et les informations pertinentes et nécessaires »
  - **‘procedural safeguards’** (*Poland, § 93*)
    - XI.228/8, § 4 CDE: « (...) modalités en lien avec les dispositifs de traitement des plaintes et de recours visés aux paragraphes 1er à 3, notamment en ce qui concerne le délai dans lequel ces plaintes doivent être traitées, la procédure à suivre et la situation du contenu faisant l'objet de la plainte au cours du traitement de celle-ci »
  - **Information on the functioning of the technology**
    - XI.228/7, § 3 CDE : « (...) modalités en lien avec l'obligation d'information visée aux paragraphes 1er et 2 [obligation d'information] »

# Safeguarding Fundamental Rights: From the EU, to the MS, to the service providers

- Assumption: it is possible to build technologies that will strike a ‘fair balance’, yet:
  - Stakeholders dialogue: « (...) **In the present state of the art, no technology can assess to the standard required in law whether content, which a user wishes to upload, is infringing or a legitimate use (...)** »
  - Adv. Général Saugmandsgarrd Øe in *Poland*, § 212 : « (...) the obligation laid down in Article 17(7) of Directive 2019/790 does not mean that the mechanisms which lead to a negligible number of cases of ‘false positives’ are automatically contrary to that provision. Nevertheless, the error rate should be as low as possible. It follows that, **in situations in which it is not possible, in the current state of technology**, for example as regards certain types of works and protected subject matter, **to use an automatic filtering tool without resulting in a ‘false positive’ rate that is significant, the use of such a tool should, in my view, be precluded** under paragraph 7.
- => SOTA?

# Technical aspects of filtering

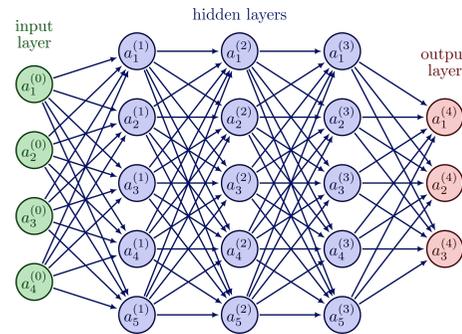
- Watermarking
  - Secret signature embedded into works
  - Robust to various transformations
  - Invisible, yet retrievable by owner
  - No false positive possible



# Technical aspects of filtering

- Fingerprinting

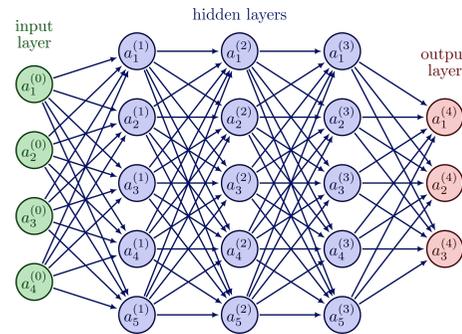
- Fingerprints (lists of numbers) represent the work
- Comparing fingerprints // comparing the works (ideally..)
- Recent techniques: Deep Learning (Artificial Neural Networks)



# Technical aspects of filtering

- Deep Learning

- Complex mathematical models (millions of parameters)
- Require massive amounts of examples for training (also millions)
- Quality of model depends on quality/relevance of data (wrt task):  
**« Garbage in, Garbage out »**



# Insights from IPSAM

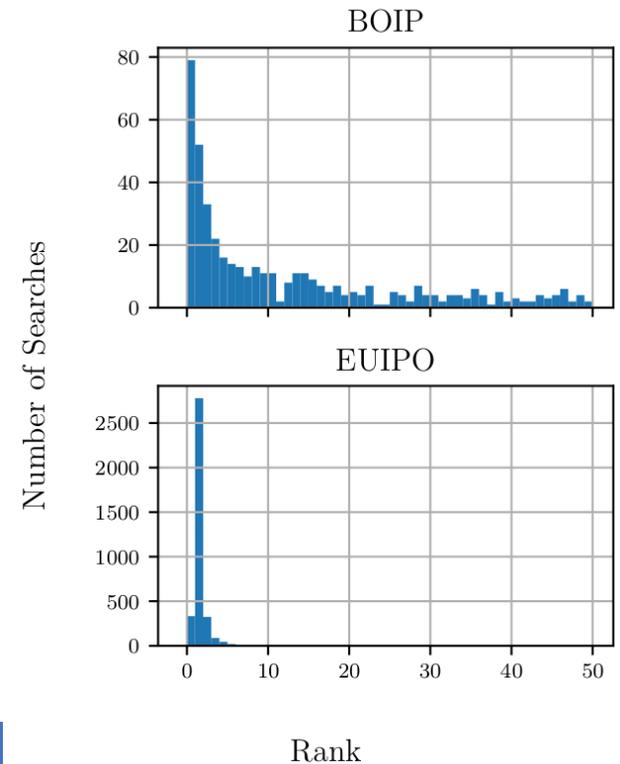
- Assessment of TM Search Engines (BOIP + EUIPO)
- Using EUIPO Opp. Div. Decisions (**task-relevant**)

=> **Very poor results !**

TM Law -> numerous task-relevant labeled data and standard objects.

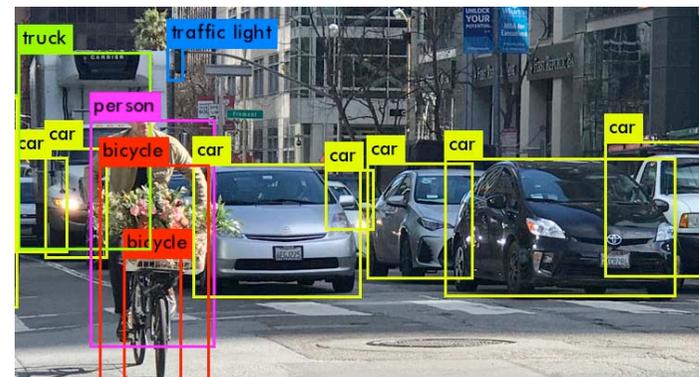
**What about Copyright Law ?**

System	Decisions	Matches	Ratio
BOIP	5 761	445	<b>7.72 %</b>
EUIPO	5 852	3 647	<b>62.32 %</b>



# Insights from IPSAM

- Based on SOTA, is it **possible to build a « filtering system which might distinguish adequately between unlawful content and lawful content »**?
- It supposes:
  - (1) Possibility to identify what is ‘**manifestly infringing**’
  - (2) Possibility of a ‘**human review**’ of ‘**non manifestly infringing upload**’ that would **not** amount to an ‘**independent assessment**’
- (1) and (2) are function of **Quality** and **Quantity** of data as to infringement?
  - Case law (issue left to judges) = Data
  - Legal assessment = Labels
    - (A) Requirements for protection are met?
    - (B) Requirements for infringement are met?
    - (C) Requirements for exception are not met?

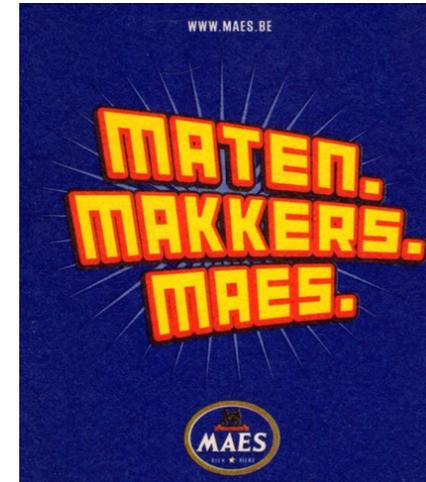


# Insights from IPSAM

- Quality of data?
  - (A) Originality?



Civ. Mons (cess.), 18 Nov. 2005 (Yes)  
Mons, 3 Feb. 2014 (No)



Comm. Anvers (cess.), 17 June 2008 (No)  
Anvers, 29 June 2009 (Yes)

# Insights from IPSAM

- Quality of data?
  - (B) Similarity?



Civ. Bruxelles (cess.), 11 Mar. 2005 (Yes)  
Bruxelles, 6 Dec. 2007 (No)



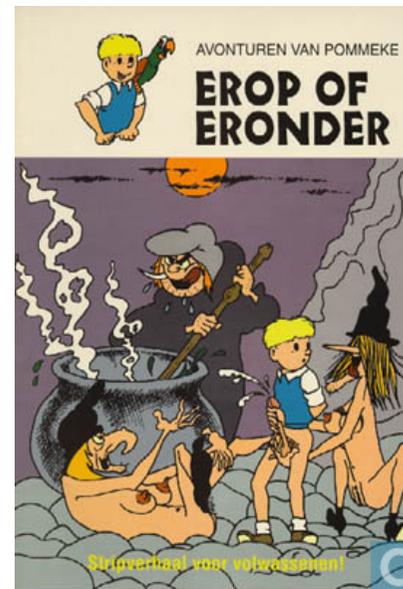
Comm. Bruxelles (cess.), 17 Sp. 2008 (No)  
Bruxelles, 12 Apr. 2011 (Yes)

# Insights from IPSAM

- Quality of data?
  - (C) Parody?



Bruxelles, 14 juin 2007 (Yes)



Anvers, 11 octobre 2000 (No)

# Insights from IPSAM

- Quality of data? The example of relevant similarities
  - **No set test in Belgian** case law (Cabay 2012)
  - **No harmonised test at EU** level (Cabay 2016)
    - Ex. 'overall impression'
      - Netherlands: YES (Hoge Raad, 12 Apr. 2013)
      - France: NO (Cass. (com.) (France), 8 Apr. 2014)
      - Belgium : 'YES' (Cass. 25 Sep. 2003)
  - Where test is more stable (USA), **no consistency** (Asay)
  - **Biases** in similarity assessment (Balaganesh, Manta, Wilkinson-Ryan)

# Insights from IPSAM

- Quantity of data? The example of relevant similarities

	© (Cabay 2012)	TM (Cabay/Vandamme/Debeir)
Period sample	1886-2011 (= 125 years)	2016-2022 (= 7 years)
Number of decisions	87 (72 infringement + 15 parody)	5.852
Type of objects	Several (graphical, applied arts, musical, literary, architecture, cinematographic, theater)	One (2D images)
Infringement test	Not set	LoC (CJEU case law)

# Insights from IPSAM

- **Poor performances of SOTA in TM (IPSAM) despite 'Quantitative/Qualitative' Data :**
  - 7,72% (BOIP)
  - 62,32% (EUIPO)\*
    - Probably much less (*supra*)
    - = irrelevance of "false positive' rate' (Adv. Gen.) or 'average level of efficiency' (EC)
- **Based on SOTA, it is certainly not possible to build in © a « filtering system which might distinguish adequately between unlawful content and lawful content » since no/less 'Quantitative/Qualitative' Data**
  - It will not be possible to identify what is 'manifestly infringing' in many cases
  - Any 'human review' of 'non manifestly infringing upload' would amount to an 'independent assessment'

# Insights from IPSAM

- The Good = identical content;
- The Bad = equivalent content
- The Ugly = similar content
- => Any technology that would match 'similar' contents (other than 'identical/equivalent') is incompatible with Fundamental Rights and shall be prohibited (Cabay 2020)



# Call for action

- Need for more legal certainty & technical transparency
- Belgium/EU (taking into account non-stakeholders expertise)
  - **Prohibit** explicitly technology targeting 'similar' contents
  - Specify 'relevant and necessary **information**' to be provided by right holders
  - Adopt **transparency** obligation as to the 'Information on the functioning of the technology'
- Join us at ULiège on May 12!
  - J. Cabay, E. Rosati, "Regulating Technology Through Copyright Law: The Way Forward for Building a Digital Single Market?", in P. Van Cleynenbreugel, J. Wildemeersch (eds), *Questions Choieses de Droit Européen des Affaires/Selected Issues in European Business Law*, Bruxelles, Bruylant, 2023, pp. 81-114



# 60 years of European law at ULiège

Echoes from the past,  
prospects for the future



11 & 12 MAY  
2023

7 points OBF

Journées internationales David-Constant  
Évènement soutenu par le Fonds David-Constant

INFO & REGISTRATION

[www.eulegalstudies.uliege.be/60-ans-droit-europeen](http://www.eulegalstudies.uliege.be/60-ans-droit-europeen)

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Many thanks (again) for your attention, comments and questions !

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