

Patent Landscape Analysis Case Study

24-02-2022 Start time 15:00 End time 18:00

INSTRUCTIONS

The patent landscaping analysis case study consists of three parts:

1. Data processing
2. Data analyzing
3. Reporting

Download the Excel-file with the publication numbers on which your analysis should be based. The first sheet shows the topic, the second sheet provides patent publication numbers in formats suitable for upload in various databases (Derwent Innovation, PatBase, Orbit and PatentSight).

After you have read the case study, please click on the **START** button at the bottom of that page. You will still see the same information, but then you can also enter a response and upload (intermediate) documents including your answers using the answer template provided.

You have **three (3) hours** to finish this case study.

In case of any issues, contact exam@qipip.org. This mailbox will be monitored during the exams.

Case study (max 70 points)

Please perform the 3 tasks listed below with the provided data set (see DOWNLOAD files).

Answer format: Can be Word, PowerPoint, PDF, or Excel (Task 3 - Make sure your analysis is in a separate sheet/tab if you are providing your answers as an Excel document. You may also use different formats for different tasks.)

You can upload multiple files, but please be aware that you cannot upload more than a maximum of 10 Megabytes for all uploaded files in total. Should the total size of all your files exceed this limit, try to compress the files so that the total of all of the files to be uploaded is under 10 MB (please note zip files cannot be uploaded).

Task 1: Data processing (Max 20 points)

- Please provide a family reduction of the collection and submit a workbook with your results.
- Please share which reduction method you used and why you used the selected method.
- Please discuss your method of assignee harmonization and give five examples of assignees that were harmonized (show the starting and harmonized assignee group).

Task 2: Data analyzing (Max 30 points)

- Create a chart that shows the general trend of the collection over time. Explain your choice of date field for this visualization.

- Provide a visualization of the top 25 assignees.
- Provide a visualization of top assignees over time and give two-three examples of a dramatic change in assignee rank based on more recent publications.
- Categorize the collection using a patent classification scheme to identify the top technologies and provide a visualization (select hierarchy level of the patent classification scheme and explain your choice).
- Categorize (a selection) of your collection into at least three technological sub-categories and provide a visualization (explain your choice).
 - Provide a visualization of the above sub-categories over time and give two-three examples of how these sub-categories have changed over time.
- Provide an automated or semi-automated technology-based clustering of the collection, such as a spatial concept map or a machine learning based classification and explain the value of this type of analysis.
- Provide a citation analysis of the collection, such as a citation network diagram and explain the value of this type of analysis.

Task 3: Reporting (Max 20 points)

- Please provide a list of the insights generated from the visualization from task 2.
- Write an executive summary, including actionable next steps based on your analysis.