Nanopore Sequencing

Patent Landscape Analysis

February 2019

From Patents to Business Intelligence
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For each selected player:
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We Know Technology, We Know Patents
INTRODUCTION
Scope of the Report

• This report provides a detailed picture of the patent landscape for nanopore sequencing.
• This report covers patents published worldwide up to August 2018.
• We have selected and analyzed about 1,600 patent families relevant to the scope of this report.

Included in the report
✓ Patents related to nanopore sequencing
✓ Patents related to the three main nanopore sequencing modalities:
  ✓ Protein nanopores
  ✓ Solid-state nanopores
  ✓ Hybrid nanopores
✓ Patents related to various applications nanopore sequencing can be used for, such as:
  ✓ infectiology
  ✓ oncology
  ✓ prenatal diagnostics

Not included in the report
X Patents only dedicated to other sequencing methods
X Patents about nanopores not claiming or mentioning a sequencing application
INTRODUCTION

Key Features of the report

- The report provides **essential patent data** about **nanopore sequencing**.

- It provides **in-depth patent analyses** of **key technologies** and **key players** including:
  - Time evolution of patent publications and countries of patent filings.
  - Current legal status of patents.
  - Ranking of main patent applicants.
  - Joint developments and IP collaboration network of main patent applicants.
  - Key patents.
  - Relative strength of main companies IP portfolio.
  - Matrix patent applicants/technology issues for main IP players.

- The **IP profiles of 20 key players** is presented, including key patents, technological issues, partnerships, IP strength: Oxford Nanopore Technologies, Agilent Technologies, Pacific Biosciences of California, Illumina, Harvard University, University of California, etc.
Key Features of the report

• The report also provides an extensive **Excel database** with all patents analyzed in the report.

• This **patent database** allows multi-criteria searches, including:
  - Patent publication number
  - Hyperlinks to the original documents
  - Priority date
  - Title
  - Abstract
  - Patent assignees
  - Technical segmentation
  - Legal status for each member of the patent family

• This report **does not provide** any insight **analyses or counsel regarding legal aspects** or the validity of any individual patent. Knowmade is a research firm that provides technical analysis and technical opinions. Knowmade is not a law firm. The research, technical analysis and/or work proposed or provided by Knowmade and contained herein is not a legal opinion and should not be construed as such.
Patent Landscape Overview
Patent assignees, IP dynamics, patent legal status, patent geographical coverage
Patent Portfolios Benchmarking: Beyond the Quantity

Who has the best patent portfolio?
Patent Segmentation
What are the key IP players per nanopore technology?
Patent Segmentation

What are the key IP players per application?
Key elements summary

Key IP players, key patents
Excel file with all patents analyzed in the report

Useful patent database allows multi-criteria searches
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Invalidate competitor’s patents in the course of patent litigation or in anticipation of one.
Make third-party observations concerning the patentability of competitor’s inventions.

Patent landscape analysis
Understand the competitive environment and the technology trends from a patent perspective.
Identify key players, their IP strategy and their key patents.
Know IP collaborations, licensing agreements and litigation history.

Freedom-to-operate analysis
Assess the risks to infringe third-party patents.
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Litigation and licensing support
Evidence of infringement/non-infringement for offensive/defensive support.
Defend your position in licensing negotiation or patent litigation.

Patent assessment
Identify most valuable patents prior to patent acquisition/sales, licensing agreement, capital fundraising process, M&A or IP due diligence.
Estimate the financial value of your patent portfolio.

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Assess the patent portfolio of a company and reveal the SWOT matrix prior to patent acquisition/sale, licensing agreement or M&A.

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