The Global Leader in CRISPR/Cas9 Licensing

Formed to commercialize the Nobel Prize winning invention of CRISPR/Cas9 gene editing, ERS licenses worldwide access to the essential CRISPR/Cas9 patent portfolio.

Since its founding in 2014 by Nobel laureate **E**mmanuelle Charpentier, along with **R**odger Novak, and **S**haun Foy (**"ERS"**), ERS Genomics has been the leading provider of access to the most comprehensive collection of proprietary rights to the foundational patents covering CRISPR/Cas9.

CRISPR/Cas9: A Revolutionary Genome Editing Technology

Nobel Prize in Chemistry awarded to scientists who discovered CRISPR gene editing tool for 'rewriting the code of life'

By Emma Reynolds and Katie Hunt, CNN
Updated 9:54 AM ET, Wed October 7, 2020

The Nobel Prize in Chemistry has been awarded to Emmanuelle Charpentier and Jennifer A. Doudna for the development of a method for genome editing.

They discovered one of gene technology's sharpest tools: the CRISPR/Cas9 genetic scissors. Using these, researchers can change the DNA of animals, plants and micro-organisms with extremely high precision.

The Essential Intellectual Property for the Practice of CRISPR/Cas9

The CRISPR patent portfolio licensed via ERS (known as the CVC portfolio) is the most comprehensive collection of proprietary rights to the fundamental CRISPR/Cas9 gene editing platform. ERS grants non-exclusive licenses to a growing list of issued and pending patent applications globally, in all fields excluding human therapeutics.

Foundational patents have been awarded on the CRISPR/Cas9 technology globally with claims covering the following subject matter:

- Compositions and methods of using Cas9 with a guide RNA to form a CRISPR/Cas9 complex that binds a specified DNA sequence
- Various formats for delivering CRISPR/Cas9 complexes in cells of all types
- Use of the CRISPR/Cas9 complex to cleave DNA (resulting in knock-outs, insertions or mutations)
- Use of mutated Cas9 to 'nick' DNA (in place of cleavage) or to bring an effector domain to a specified DNA sequence to regulate gene expression in a cell
- Compositions of guide RNAs in a variety of formats including various lengths, chemical modifications, and base compositions

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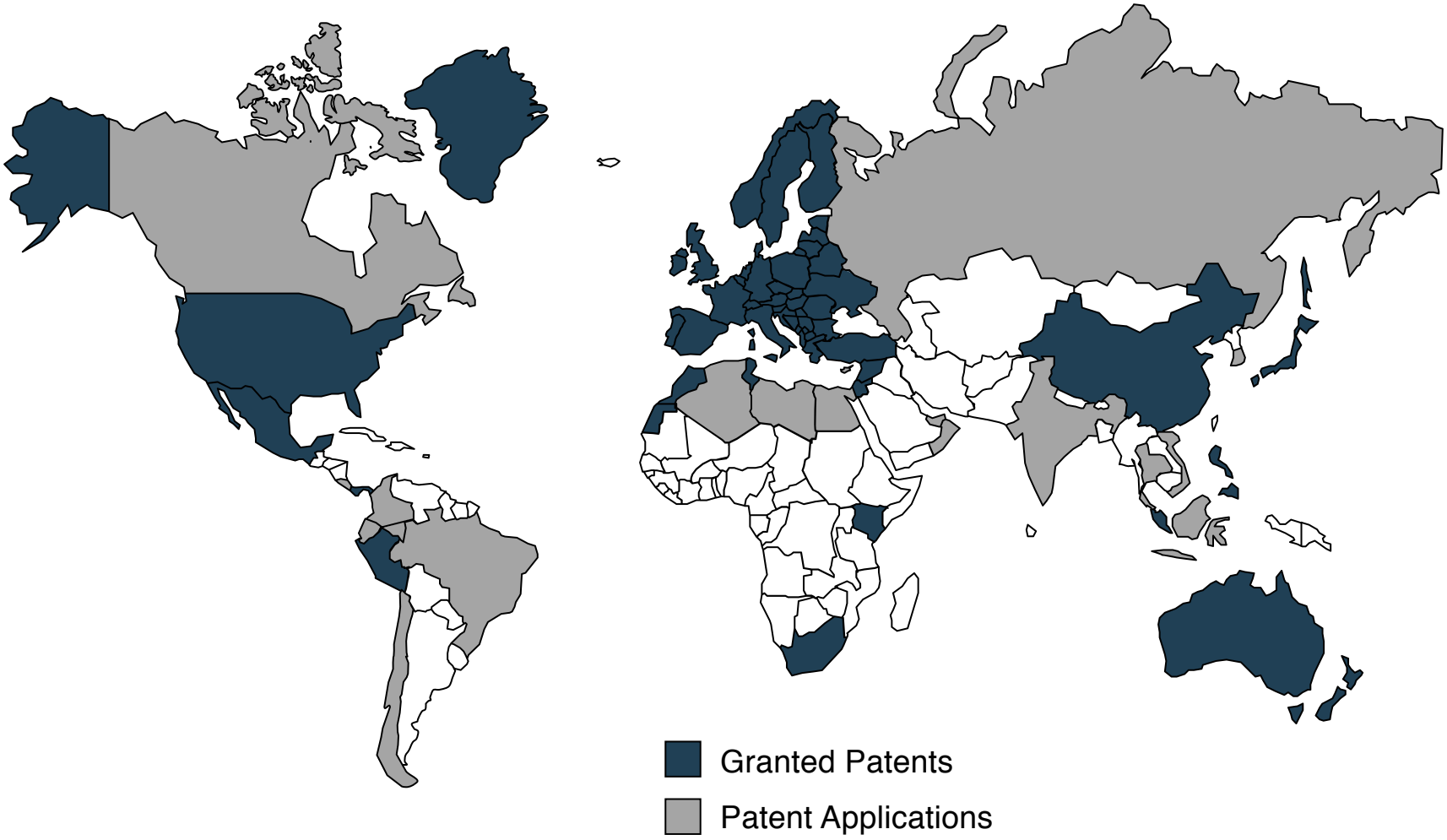
Our World Patent Status



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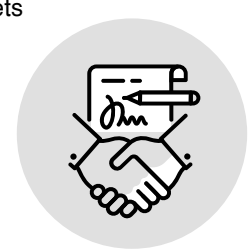
Empowering the CRISPR/Cas9 Platform Globally by Offering Nonexclusive Licenses in the Following Areas:

Pharmaceutical and Biotech Companies

- Target discovery and validation
- Development and GMP production of therapeutic proteins and vaccines
- High-throughput screening
- Diagnostics
- Animal models of disease
- All internal R&D including sharing cell and animal models with collaborators

CROs, CMOs and Tools Providers

- Cell lines for laboratory research and/or manufacturing
- Animal models for laboratory research and/or manufacturing
- Discovery and screening of novel drug targets
- Target and pathway validation
- Research tools, kits, and reagents
- GMP production of healthcare products

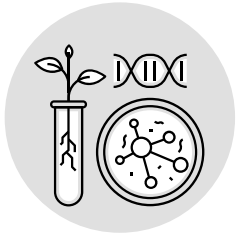


Industrial and Synthetic Biology Applications

- Internal R&D of microbial, fungal, and algal strains
- Strain optimization
- Commercial manufacturing using modified strains
- Metabolic pathway engineering

Agriculture and Livestock Applications

- All internal R&D for trait discovery and development
- Creation and commercialization of modified strains for food and feed



Companion Animal and Veterinary Applications

- CRISPR based animal therapeutics
- Manufacturing of therapeutic proteins and vaccines
- Target discovery and validation
- High-throughput screening

Select Licensees

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Internal Research Use

MERCK

BAYER

gsk GlaxoSmithKline

Daiichi-Sankyo

REGENERON

ucb

CROs, CMOs

charles river

TACONIC Models For Life.

evotec

Industrial BioProduction

Lonza

DUPONT

evolva

Tools/Reagents

ThermoFisher SCIENTIFIC

NEW ENGLAND BioLabs

SYNTHEGO

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What If We Do Something Incredible Together?

Our team has decades of experience in the field of genome editing and its application, in business development and licensing, licensing preclinical and clinical stage therapeutic products and drug delivery technologies, genome editing technologies as well as overseeing research and development.

Reach out today to get started.

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