

WIPO Seminar

# **The Determinants of COVID-19 Vaccine Development Success**

**- Comments on the report -**

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# **Six comments on methodology and lessons learned**

- \* Necessary limitations of the research question**
  - Study explores different determinants**
  - Comparative analysis of role of determinants impossible due to different starting points**
  
- \* Assessing the different functions of licenses**
  - Licenses play a central role but...**
  - ... few licenses are publicly available**
  
- \* Relationship of patents and trade secrets**
  - Know-how of innovators is partly kept secret**
  - 'Grand bargain' of innovators and society distorted**



# **Six comments on methodology and lessons learned**

- \* IP resulting from public funded research**
  - Technologies of US universities under Bay-Dole Act**
  - EU programs ('Horizon 2020') allow exclusive licenses**
  
- \* Market failures in the development of vaccines**
  - Market failures could be solved for Covid-19 vaccines**
  - How to transfer lessons learned to other pathogens**
  
- \* Positive functions of patents & blocking effects  
in vaccine development**
  - Beyond exclusion: Basis for tech' transfer, 'signalling'**
  - Blocking effects of patents on basis technologies?  
Moderna/Arbutus etc., but no cases in ' Global South'**
  - Debate in TRIPS waiver is symbolic, not practical**

# Emerging patent landscape

## ANALYSIS

Close

Filters Charts



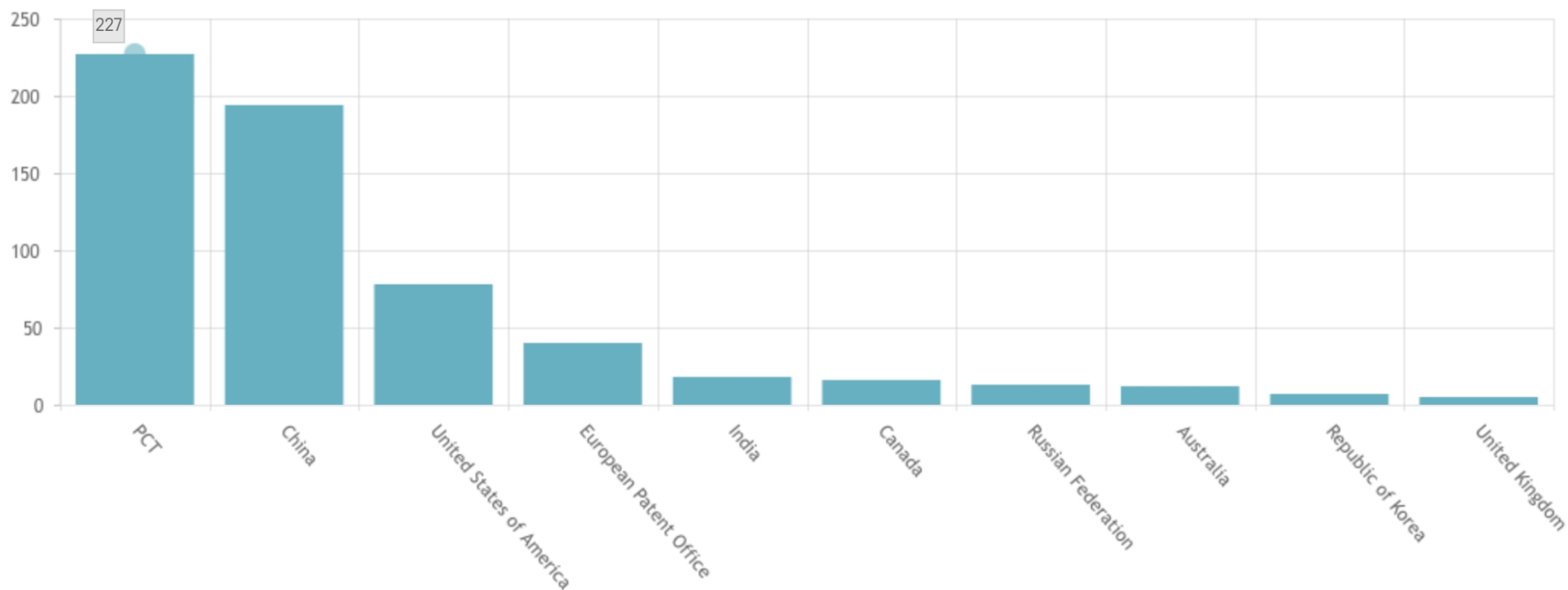
Countries

Applicants

Inventors

IPC code

Publication Dates



Patentscope: “SARS & Vaccine”

5.5.2022

Metzger

# Emerging patent landscape

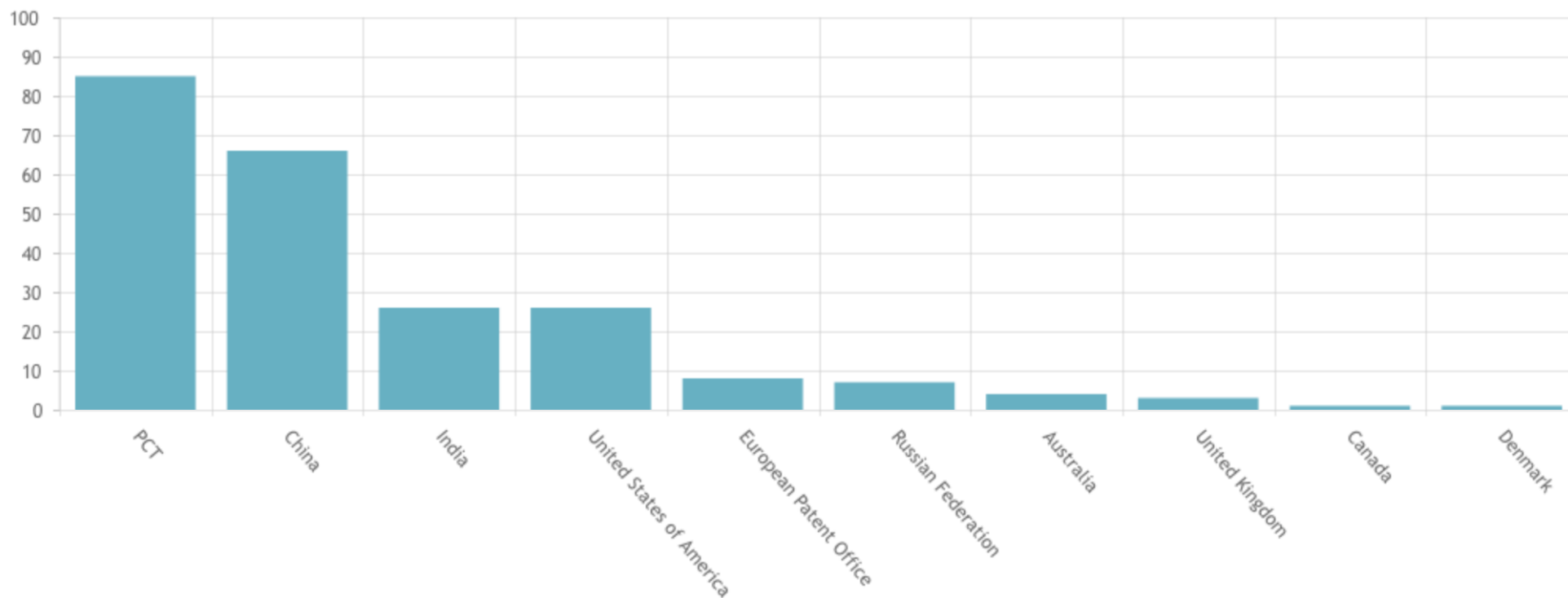
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Patentscope: “Covid & Vaccine”

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# Emerging patent landscape



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## ANALYSIS

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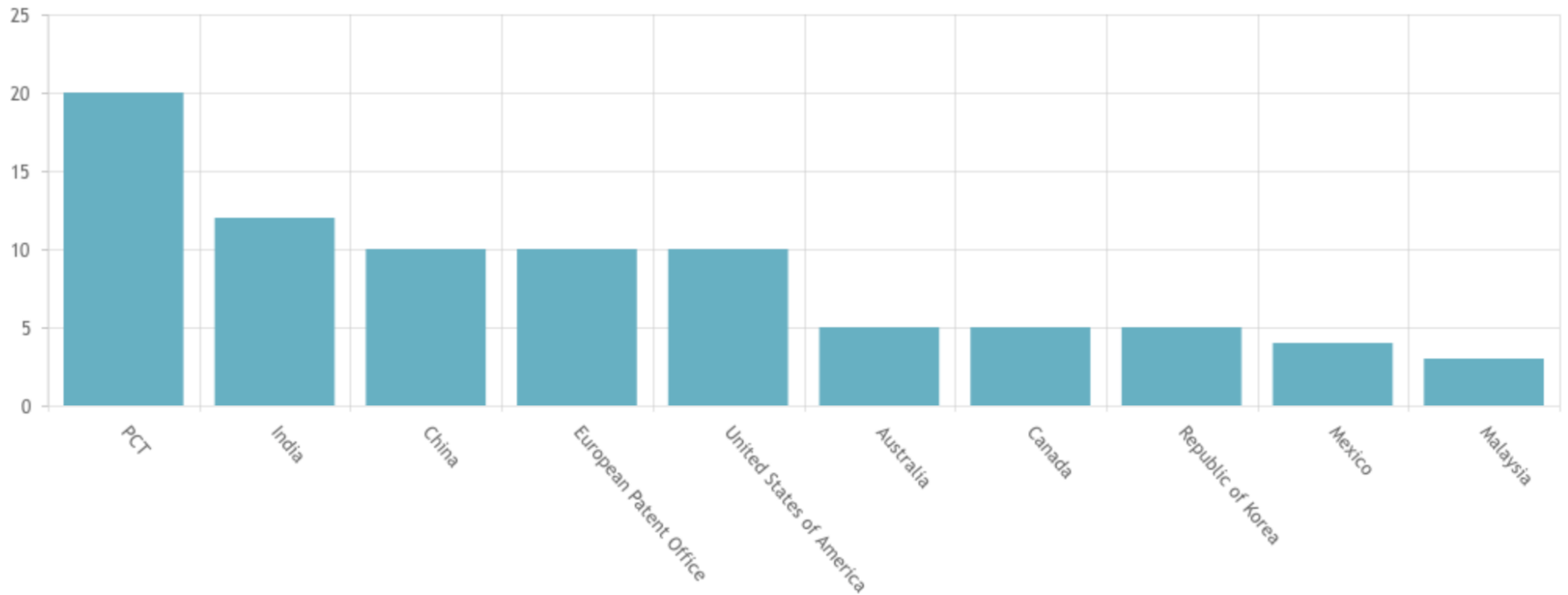
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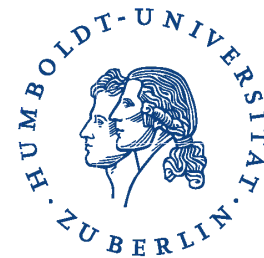


Patentscope: “Corona & Vaccine”

5.5.2022

Metzger

# Emergent patent landscape



## BioNTech:

- WO/2021/197589 - TREATMENT INVOLVING NON-IMMUNOGENIC RNA FOR ANTIGEN VACCINATION (App Date 31.03.20)
- PCT/EP2020/059170 - TREATMENT INVOLVING NON-IMMUNOGENIC RNA FOR ANTIGEN VACCINATION (App Date 31.03.20)
- EP3901260 - CORONAVIRUSIMPFSTOFF: (App Date 16.04.21 - früheste Priorität: 22.04.20) - >> Patentfamilie: EP3901261; GB2594364; GB2594365; EP3901260
- WO2021213924 - CORONAVIRUS Vaccine: (App Date 16.04.21 - früheste Priorität: 22.02.20) ->> Patentfamilie: WO/2021/213924; CN113521268; CN113521269

## Moderna:

- WO/2021/231963 - RNA FORMULATIONS FOR HIGH VOLUME DISTRIBUTION, AND METHODS OF USING THE SAME FOR TREATING COVID-19 (App 14.05.21)
- WO/2021/159130 - CORONAVIRUS RNA VACCINES AND METHODS OF USE (App 14.05.21)
- US20200254086 - EFFICACIOUS MRNA VACCINES (App. 17.08.18)

## Novavax:

- US20210228709 - CORONAVIRUS VACCINE FORMULATIONS (App Date 18.03.21)
- US20210228708 - CORONAVIRUS VACCINE FORMULATIONS (App 08.02.21)
- WO2021154812 - CORONAVIRUS VACCINE FORMULATIONS (App 27.01.21)
- US10953089 - CORONAVIRUS VACCINE FORMULATIONS (App 19.08.20)

## Oxford:

- WO2021181121 - STABILISED VIRAL FUSION PROTEINS (App Date 12.03.21)
- WO2021181100 - COMPOSITIONS AND METHODS FOR INDUCING AN IMMUNE RESPONSE (App Date 11.03.21)

**→ Landscape of patents on Covid vaccines is still emerging**

5.5.2022

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