

# IPR and Energy Innovation

Dr Mash-Hud Iqbal

1 July 2019

10th anniversary Cleanpower Smart Grids  
Conference 2019

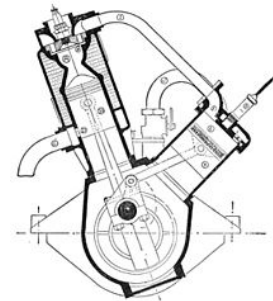
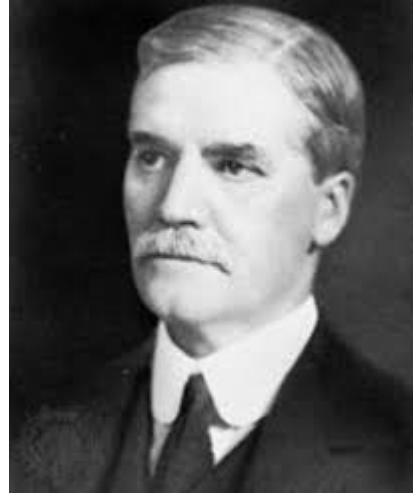
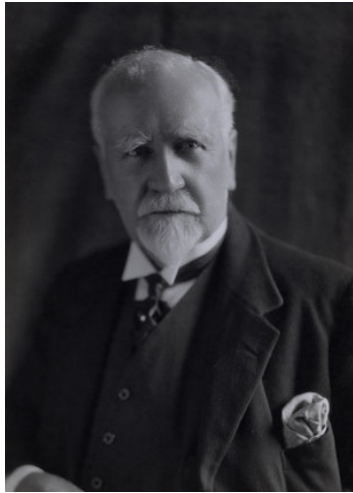
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# Introduction to Marks & Clerk LLP

# Marks & Clerk overview



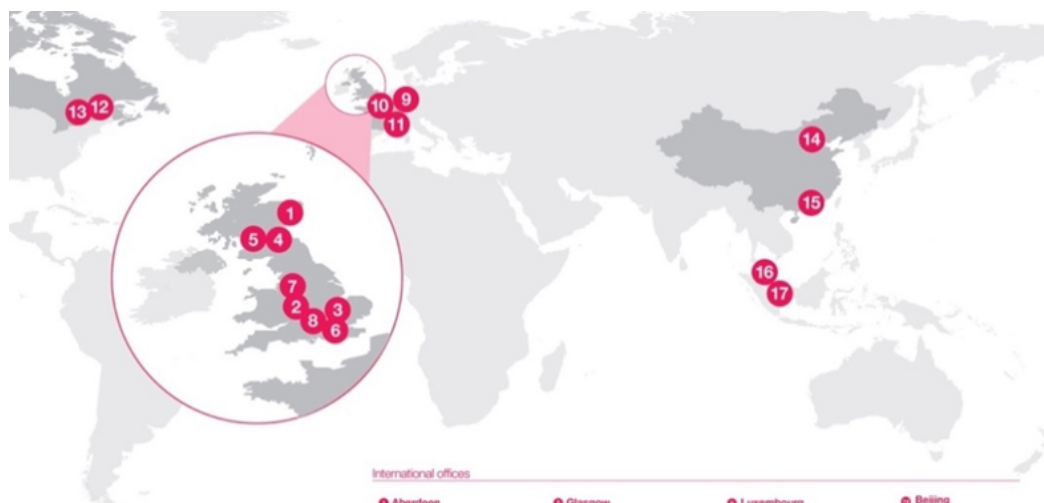
- Founded in 1887 – we continue to build on our heritage
- Marks & Clerk LLP is the largest intellectual property attorney firm in the UK and one of the largest in Europe
- We are consistently ranked in the top tier for Chambers & Partners UK and Legal 500 UK.



# About us



- 105 Partners (many of whom have been individually ranked in legal directories)
- 280 Over attorneys and trainee attorneys
- 27 Solicitors – 20 qualified lawyers with 7 partners
- 800 Staff in the organisation
- 17 Offices around the world



#### International offices

- |  |  |  |  |
|--|--|--|--|
| 1 Aberdeen<br>United Kingdom<br>+44 1224 957100    | 4 Glasgow<br>United Kingdom<br>+44 141 221 5767    | 9 Luxembourg<br>+352 40 02 70                      | 14 Beijing<br>China<br>+86 10 6236 5058        |
| 2 Birmingham<br>United Kingdom<br>+44 121 643 5881 | 5 London<br>United Kingdom<br>+44 20 7420 0000     | 10 Paris<br>France<br>+33 1 41 48 45 00            | 15 Hong Kong<br>China<br>+852 2526 6345        |
| 3 Cambridge<br>United Kingdom<br>+44 1223 345520   | 6 Manchester<br>United Kingdom<br>+44 161 233 5800 | 11 Sophia Antipolis<br>France<br>+33 1 41 48 45 00 | 16 Kuala Lumpur<br>Malaysia<br>+60 3 2283 8986 |
| 7 Edinburgh<br>United Kingdom<br>+44 131 221 7000  | 8 Oxford<br>United Kingdom<br>+44 1865 397900      | 12 Ottawa<br>Canada<br>+1 613 236 9561             | 17 Singapore<br>+65 6227 8986                  |
|  |  | 13 Toronto<br>Canada<br>+1 416 595 1155            |  |

A world leader  
in intellectual  
property

# Marks & Clerk Law



Our UK firm consists of two separate legal entities, the Patent and Trade Mark Attorney firm and our Solicitors firm, who work in conjunction with one another.

Our solicitors firm is one of the leading, and largest specialist IP law firms in the UK comprising around 30 fee earners, of which 18 are qualified lawyers and 9 are partners.

Our lawyers have wide experience advising and representing clients at all levels of the UK courts, and in recent years have acted on high-profile cases before both the UK and European Courts. With most of our lawyers coming from a science or engineering backgrounds, we have significant understanding of patent litigation. As a result we regularly advise on:

- Providing validity and infringement opinions.
- Bringing and defending legal proceedings in the Courts.
- Advising on strategic issues relating to UK rights and IP rights across Europe and the world.
- Representing clients in arbitration and mediation.

The commercial team can also provide market-focused advice on all aspects of non-contentious and transactional IP law with clients ranging from multinational companies and investment funds to university spinouts and SMEs operating across all major industry sectors.

# Our values



**trust**



**collegiality**



**resourcefulness**



**excellence**



**Maureen Kinsler**  
Chairman

## Our Vision

To be the leading provider of IP services by putting our people and our clients at the heart of everything we do, by delivering excellence as a minimum.

# Intellectual property Rights

# Broadly two types of Intellectual Property

## Registered rights

Patents

Designs

Trade marks

## Unregistered Rights

Confidential information (trade secrets, know-how)

Copyright

Unregistered design rights

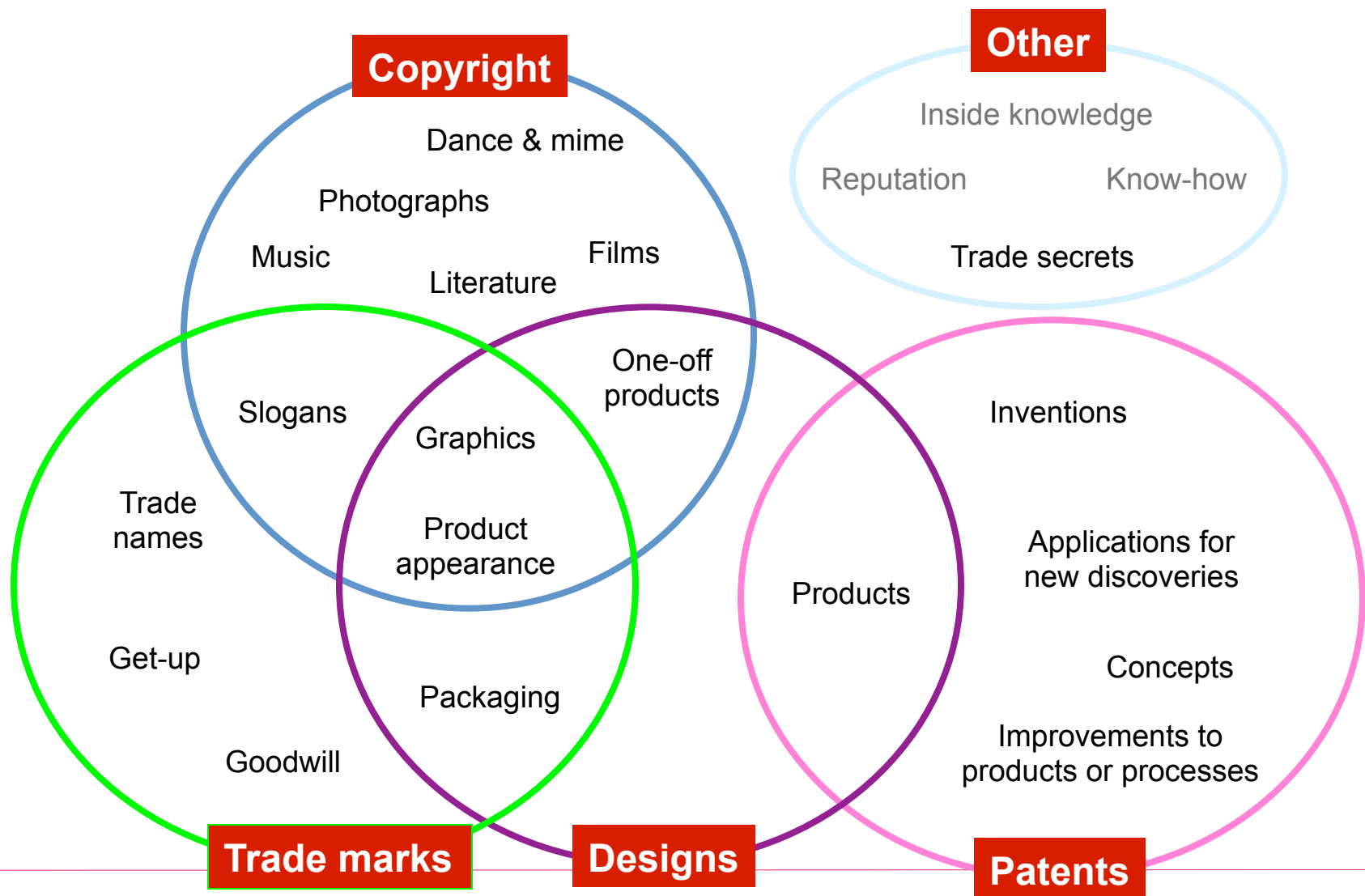
Domain names















































































































## IP rights

- Patents  
Protect inventive concepts – how things work
- Designs  
Protect consumer products – how they look and feel
- Trade marks  
Protect a company's brands/logos/slogans
- Copyright  
Automatic right preventing copying of (broadly speaking) artistic works
- Confidential information  
Has advantage of no publication, but risky and cannot license or sell

# IP rights



# Energy Innovations

|                            |   |   |   |   |   |   |   |
|----------------------------|---|---|---|---|---|---|---|
| WASTE                      | Massburn<br>RDF                                 |     |     |     |     |     |     |
| CCS                        | CCS   |    |    |    |    |    |    |
| Hydrogen<br>&<br>Fuel cell | OTFC<br>MCFC<br>SOFC<br>FEMFC<br>H_str<br>H_pro |    |    |    |    |    |    |
|                            |   |    |    |    |    |    |    |
|                            |   |    |    |    |    |    |    |
|                            |   |    |    |    |    |    |    |
|                            |   |    |    |    |    |    |    |
| Ocean                      | Wave<br>Tidal                                   |    |    |    |    |    |    |
| Geothermal                 | Pump<br>System                                  |    |    |    |    |    |    |
|                            |   |    |    |    |    |    |    |
| Hydro                      | Hydro   |    |    |    |    |    |    |
| Bio                        | Biochem<br>Tiermochem                           |    |    |    |    |    |    |
|                            |   |    |    |    |    |    |    |
| Wind                       | Wind  |   |   |   |   |   |   |
| Solar                      | THM_Heat<br>THM_Coll<br>PVT_sys<br>PVT_cell     |  |  |  |  |  |  |
|                            |   |  |  |  |  |  |  |
|                            |   |  |  |  |  |  |  |
|                            |   |  |  |  |  |  |  |

EPO

PCT

USPTO

JPO

KIPO

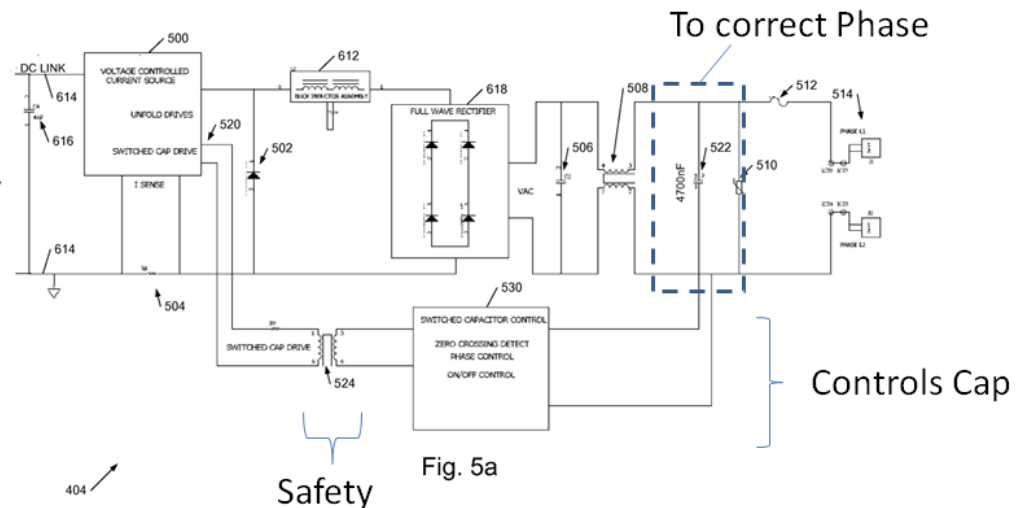
SIPO

# How to convert IPR into successful products



- Cambridge start up (2006-2013)
- Solar Inverter technology

DC-DC Converter



# How to convert IPR into successful products



## IP Strategy

Enecsyst's IP strategy aims to support some of their important product differentiators, in particular:

- Performance - energy harvest, efficiency and power range
- Reliability – low annualised failure rate
- Lifetime – targeted at equal to or greater than the solar module
- Cost – manufactured cost per Watt and gross margin
- Ease of use – low installation time and skill
- Regulatory compliance – meeting safety and power quality standards
- Communications and intelligence – reliable monitoring and control systems

# How to convert IPR into successful products



## IP Strategy

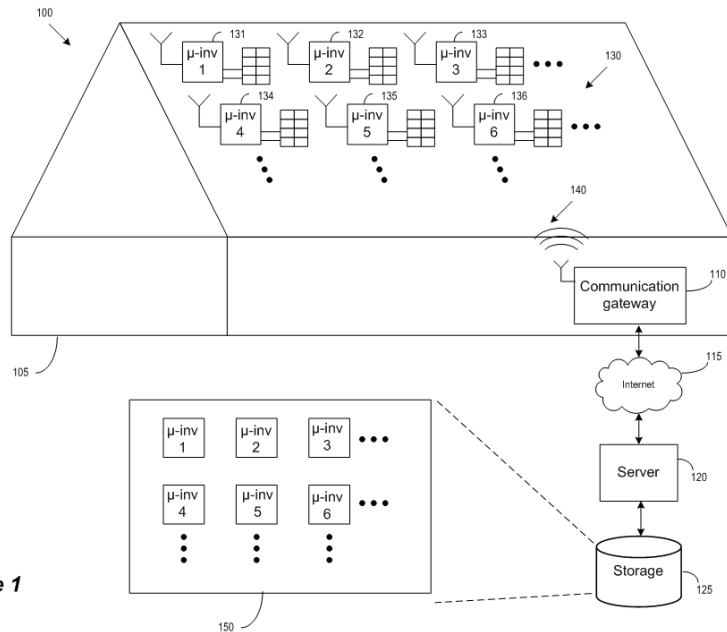
The IP strategy has also included:

- utility model filing - filings for short term patents for quick grants
- divisional and (in the US) continuation application filings - to mine applications for additional protectable subject matter
- accelerated prosecution - an aggressive approach was been adopted to accelerating prosecution in the UK and US under their respective Green Technology programs and by other means, to achieve early grants

This has resulted, inter alia, in a significant number of granted US patents given the time period concerned.

# How to convert IPR into successful products

- Enecsys moved to California in 2011
- Enecsys was taken over by SolarCity 2014





# How to convert IPR into successful products

Tesla merged with SolarCity in 2016 and continue to use the technology in their 3 phase chargers



Any questions?

# Contacts



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