



IP Owners Step up to the Plate

How large IP owning businesses have shared their most valuable assets to help combat Covid-19

The centenary of the IP Federation could hardly have come at a more challenging and difficult time for the economy.

In the past, it has been asserted that intellectual property rights are unhelpful in times of crisis, when technological cooperation is most called for. However, the reaction of the UK's biggest IP owning businesses to the current crisis could not paint a more different picture.

A combination of continuing innovation and the sharing of hard-earned rights, the result of so much investment of time, money and resources, is being used to combat the challenges facing our society as a result of the Covid-19 pandemic.

That sharing has taken many different forms and encompassed many different intellectual property rights. Companies have literally opened their books and shared complex technical drawings, tools, data and know-how. Highly qualified personnel have been mobilised across different companies to ensure that this cooperation is effective in the achievement of key goals. Vital innovation has been pooled and shared to enable rapid progress in technology and pharmaceutical developments.

The help, innovation and cooperation of IP Federation member companies in support of those handling the Covid-19 crisis has taken many different forms.

Innovation

First, some companies are innovating in response to the crisis.

For example, Pfizer is involved in a global development programme to find a viable vaccine and has started clinical trials of four candidate vaccines - among the first such tests in the world.

British American Tobacco are working with their bio-tech subsidiary, KBP, on the development of plant-based vaccines. Pre-clinical testing is under-way and the use of fast-growing plant technology has the potential to allow the manufacture of 1-3 million doses of vaccine per week.

Merck Sharp & Dohme (MSD) is working with the Bill and Melinda Gates Foundation and other industry peers to accelerate the development, manufacture, and delivery of vaccines, diagnostics, and treatments for Covid-19. As part of this commitment MSD is actively participating in the

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Therapeutics, Vaccines Manufacturing, and Clinical and Regulatory workstreams.

Eli Lilly has entered an agreement with the National Institute of Allergy and Infectious diseases (NIAID) to develop potential therapeutic medicines. Clinical trials are already underway to test medicines, which are widely available, in the treatment of COVID-19 patients with acute respiratory distress syndrome (ARDS). Eli Lilly is also working, in collaboration with other companies, to develop, manufacture and distribute therapeutic antibodies that help patients neutralise the virus and recover from the disease. Over 500 unique antibody sequences were identified within a week of receiving a blood sample from a patient who had recovered from the disease.

Several companies, including Rolls-Royce, HP and BAE Systems, have created 3D printable designs for face shields and masks, mask adjusters, wrist covers, hands free door openers and other forms of PPE. Most of these designs are compatible with all printers and are free of charge. Production lines have been set up globally, but anyone with a 3D printing machine can also print at home. HP have also created a 3D printable nasal swab which has already been subject to clinical trials and is one of only four from over 100 candidates which have emerged as meeting the necessary criteria for clinical application.

BAE Systems are developing innovative training content for engineers who will be producing ventilators for the first time. The 'Unreal Engine' games platform is being used to highlight the key steps in factory acceptance testing of new ventilators and to increase the effectiveness of training for engineers, so that new production lines can be opened quickly.

Rolls-Royce have created a shield to allow doctors to introduce and remove Covid-19 patient ventilation tubes.

IP and Data Sharing

In addition to innovating specifically for the Covid-19 crisis, many IP Federation members are supporting by either providing their own existing IP to others or receiving and working with IP made available by companies with existing expertise in the relevant fields.

Of course, one of the better known examples of IP sharing involves ventilators. Airbus, BAE Systems, Ford, GKN, Renishaw, Rolls-Royce and Unilever are all members of the VentilatorChallengeUK consortium, responding to a government request to use established ventilator technology to increase production levels to meet NHS demand.

A number of companies which own existing state of the art technology in this field are making their designs, drawings and instructions freely available and then well-known manufacturing companies are using parts and materials available in the UK supply chain to replicate the designs and increase the available production. Rolls-Royce, GKN and BAE Systems have established production lines around the country to meet this demand using IP from other companies.

Microsoft and IBM are among many big Tech businesses signing up to the COVID Pledge to make IP available for use in tackling the pandemic. It does not matter whether the intended use is connected to the creation of

remedies or treatments, or minimising the impact of the disease on sufferers and the community as a whole - the IP will simply be made available under a licence. There is a basic licence with the option to use compatible or alternative licences to meet particular needs. Those companies signed up to the Pledge make this known on their websites, and a core site (opencovidpledge.org) provides more details.

Canon, and fifteen other IP owners from the high tech and healthcare industry, have made a declaration not to assert their patents, utility models, designs or copyright against those working to stop the spread of Covid-19. The Open Covid-19 Declaration covers over 300,000 patents and will reduce the time and money companies must spend in the diagnosis, prevention, containment and treatment of the disease.

AstraZeneca, Eli Lilly, Merck Sharp & Dohme, Pfizer and GlaxoSmithKline are working with IFPMA (International Federation of Pharmaceutical Manufacturers and Associations) and the World Health Organisation as part of a global team to speed up the development of safe and effective vaccines and remedies against Covid-19. This includes screening of libraries of medicines and remedies to identify potentially valuable treatments and to devise suitable clinical trials, as well as sharing tools and know-how to develop trials for diagnostic testing of potential vaccines. Clinical trial data will be shared with other companies and governments worldwide. They are also working on manufacturing capability to ensure that mass-production can take place once the right vaccines are found.

The development of organisations to support the process of sharing data and know how is an impressive aspect of the world's response to the pandemic. IBM and Rolls Royce are among those involved in Emergent - a new alliance of data analytics experts working together to find newer, faster ways of supporting businesses as they emerge from the toughest period of the crisis. Membership is entirely voluntary and all the insights will be published widely and at no cost.

Service Provision

Of course, above and beyond IP creation and sharing, many companies are simply helping in practical and constructive ways, to support the efforts of our health services and front-line supporters as they do their utmost to provide care and to help to fight the progress of the virus.

BT are providing over 400 NHS bodies with their unique Smart Messaging platform to enable efficient communication with patients and appointment reminders. They are also looking to provide Public Health England with 500 "Street Hubs" with digital screens to display the latest Covid-19 news and guidance for the public benefit, and connecting the new Nightingale Hospitals around the country as quickly and thoroughly as possible. Within 48 hours of receiving the first request it has fitted over 1000 IP phones and high speed connectivity into the London ExCel centre. BT staff are helping to support the unprecedented number of 999 calls and have provided vital humanitarian support in creating bedside video links so sick patients can see and speak with relatives despite being totally isolated.

Airbus have worked on an initiative to re-purpose some jets to fly cargo in the shape of four million face masks and other PPE from China to support NHS needs here in the UK and BAE Systems are also providing air transport to move crucial ventilator parts to where they are needed

Rolls-Royce is a supporter of airlinkflight.org, a not for profit organisation transporting relief workers and emergency supplies for non-governmental organisations responding to humanitarian crises around the world.

Reckitt Benckiser and Unilever are both promoting campaigns to support hygiene and support for care workers and the population at large. Reckitt Benckiser have provided 150,000 care packages to NHS workers, and are providing soap and sanitiser products widely. Unilever is also providing large volumes of soap, sanitiser, bleach and food and are adapting production lines to enable mass support for schools and hospitals and is working with local communities on educational projects to promote hand-washing and sanitary awareness. Unilever is also establishing a system to support its suppliers with extra-prompt payments, and its customers with favourable credit terms, to try to help smaller businesses in this very difficult market.

Procter & Gamble have been helping to tackle the Covid-19 crisis by working to protect health care workers and first responders. The company is producing hand sanitiser, face shields and disinfectant to share with hospitals, health care facilities and relief organisations.

Procter & Gamble is also working with communities and charities around the world to support their efforts to help people through this crisis with donations of product including nappies, shampoo and cleaning products; services; and cash support. The company is partnering to provide additional support with some of the world's leading relief organisations.

AGCO are manufacturing face masks, door handles and beds to support local healthcare services globally.

What all of this reflects is the unprecedented mobilisation of corporate resources and expertise to respond to this unique crisis and to try to help people all over the world to cope and survive. Far from hiding behind commercial or legal barriers, the members of the IP Federation are looking outwards and using their vast resources of innovative skills and experience to help a world in need.

Such a fantastic response to this crisis is a fitting way to mark 100 years of creative and supportive innovation.

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