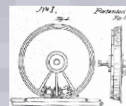


200 Years of Innovation and Growth

\$2,000

GDP per person (in 1990 US\$)

Mankind's pursuit of innovative solutions has powered human progress and transformed our world. Two centuries of breakthrough innovations have seen a 15-fold growth in per capita incomes in frontier economies. WIPO's **2015 World Intellectual Property Report** looks at six transformative technologies, and explores the role of intellectual property in innovation.



1836 Steam Locomotive

1st numbered US patent on the locomotive steam-engine

1837 Electric Telegraph

Cooke and Wheatstone patent the Five needle telegraph



1856 Plastics

1st man-made plastic invented, patented and trademarked as Parkesine

1856 Industrial Steelmaking

Bessemer patents an Improvement of the manufacture of iron and steel



1866 Scientific Plant Breeding

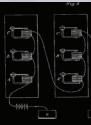
Mendel's scientific publication on plant hybridization

1905

First successful high-yielding wheat hybrid

1876 Telephone

Bell patents Improvement in telegraphy



1879 Automobiles

Benz patents Vehicle with gas engine

Ford mass-produces the Ford T

1879 Electric Lamp

Edison patents the Electric lamp



1906 Airplanes

Santos-Dumont flies his 14-bis

Wright brothers patent the Flying machine

1897 Radio

Marconi patents Transmitting electrical signals



1911 Nuclear Energy

Marie Curie wins her 2nd Nobel Prize

Nuclear plant APS-1 generates electricity for commercial use



1929 Pharmaceuticals

Fleming discovers Penicillin

1947

Mass production of Penicillin

1925 Television

Jenkins patents "Transmitting pictures by wireless"



1950 Semiconductors

Bell Labs' Semiconductor patent

1977

1st Commodore PET sold



1952 Supply Chain Innovations

Barcode patented



1954 Robotics

1st industrial robot

1996

Deep Blue beats chess master Kasparov



1953 Just-in-time Manufacturing

Toyota implements Kanban for lean production

1957 Sustainable Energy

Solar cells are patented



1969 Internet

ARPANET network deployed

1991

WWW is created at CERN

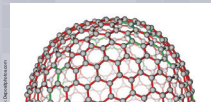


1973 Mobile Phone

1st mobile telephone call

1992

1st SMS sent

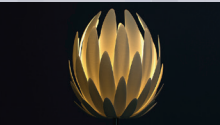


1981 Nanotechnology

Scanning probe microscopy developed

2005

Bicycle with nanotubes frame in the Tour de France



1987 3D Printing

Industrial 3D printers commercialized

2009

Low-cost 3D printers commercialized

\$25,000

\$30,000