

# **INVENTION TIMELINE**

DePaul Center for Urban Education □ 1998

## **Materials & Construction**

- 1824 – Joseph Aspdin patents Portland cement, the modern building cement.
- 1835 - Slymon Merrick patents the wrench.
- 1842 – Joseph Dart builds the first grain elevator.
- 1851 – Elisha Otis invents the mechanical elevator.
- 1866 – Alfred Nobel invents dynamite.
- 1868 – Robert Mushet invents tungsten steel.
- 1873 – Joseph Glidden invents barbed wire.
- 1891 – Jesse Reno invents the escalator.
- 1938 – Roy J. Plunkett invents Teflon.
- 1965 – Stephanie Louise Kwolek invents kevlar.

## **Transportation**

- 1814 – George Stephenson designs the first steam locomotive.
- 1836 – Francis Pettit Smith and John Ericcson co-invent the propeller.
- 1839 – Kirkpatrick Macmillian invents a bicycle that was developed to the bicycle of today.
- 1843 – Charles Pearson invents the underground railway.
- 1857 – George Pullman invents the Pullman sleeping car.
- 1884 – Gottlieb Daimler builds the first gasoline-fueled, spark ignited, piston-engine car.
- 1885 – Gottlieb Daimler invents the petrol engine and the motorcycle.
- 1888 – John Boyd Dunlop invents the pneumatic tire.
- 1898 – Rudolf Diesel invents the diesel engine.
- 1903 – The Wright brothers the first gas motored and manned airplane.
- 1911 – Charles Kettering invents the first automobile electrical ignition system.
- 1912 – De La Mole patents the first tank.
- 1923 – Garret A. Morgan invents the traffic signal.
- 1926 – Robert Goddard invents liquid-fueled rockets.
- 1937 – Frank Whittle invents the turbo jet.
- 1939 – Igor Sikorsky invents the first successful helicopter.
- 1942 – Max Mueller invents the turbo-prop engine.
- 1956 – Christopher Cockerell invents the hovercraft.
- 1969 - Hawker Siddeley invents the V/STOL Harrier jet.
- 1970 – Boeing create the 747 jumbo jet.
- 1976 – NASA develops the space shuttle.

# **INVENTION TIMELINE**

DePaul Center for Urban Education □ 1998

## **Communication & Entertainment**

- 1824 – Michael Faraday invents the first toy balloon.
- 1829 – W.A. Burt invents the typographer, the predecessor to the typewriter.
- 1829 – Louis Braille invents Braille printing.
- 1834 – George Eastman patents paper-strip photographic paper.
- 1837 – Samuel Morse invents the telegraph.
- 1838 – Samuel Morse invents Morse code.
- 1843 – Alexander Bain invents the facsimile.
- 1854 – John Tyndell demonstrates the principles of fiber optics.
- 1876 – Alexander Graham Bell invents the microphone and telephone.
- 1877 – Thomas Edison invents the phonograph.
- 1884 – Lewis Waterman invents the fountain pen.
- 1898 – Edwin Prescott patents the roller coaster.
- 1902 – George Claude invents neon light.
- 1903 – Edward Binney & Harold Smith co-invent crayons.
- 1907 - Auguste & Louis Lumiere invent color photography
- 1910 – Thomas Edison demonstrates the first talking motion picture.
- 1924 – Rice and Kellogg invent the dynamic loudspeaker.
- 1925 – John Logie Baird invents the mechanical television, a precursor to the modern television.
- 1927 – Philo Taylor Farnsworth invents a complete electronic television system.
- 1929 – Paul Galvin invents the car radio.
- 1932 – Edwin Herbert Land invents Polaroid photography.
- 1933 – Edwin Howard invents frequency modulation (FM radio.)
- 1937 – Chester F. Carlson invents the photocopier.
- 1938 – Ladislo & Biro invents the ballpoint pen.
- 1947 – Bardeen, Brattain and Schockley invent the transistor.
- 1951 – Charles Ginsburg invents the first videotape recorder.
- 1953 – RCA invents the first musical synthesizer.
- 1972 – Nolan Bushnell invents the first video game, Pong.
- 1974 – Arthur Fry invents the post-it note.
- 1979 – Cellular phones invented.
- 1979 – Sony invents the Walkman.

# **INVENTION TIMELINE**

DePaul Center for Urban Education □ 1998

## **Home/Office**

- 1810 – Peter Durand invents the tin can.
- 1823 - Charles Mackintosh invents the mackintosh (raincoat.)
- 1827 - John Walker invents the modern matches.
- 1830 – B. Thimonnier invents the sewing machine.
- 1840 – John Herschel invents the blueprint.
- 1841 – Samuel Slocum patents the stapler.
- 1846 – William Morton is the first to use anesthesia for tooth extraction.
- 1848 – Waldo Hanchett patents the dental chair.
- 1849 – Walter Hunt invents the safety pin.
- 1850 – James Harrison and Alexander Twining invent the refrigerator.
- 1858 – Hamilton Smith patents the rotary washing machine.
- 1880 – The British Perforated Paper Company invents a form of toilet paper.
- 1884 – James Ritty invents the mechanical cash register.
- 1886 – Josephine Cochrane invents the dishwasher.
- 1893 – W. L. Judson invents the zipper.
- 1896 – H. O'Sullivan invents the rubber heel.
- 1899 – J.S. Thurman patents the motor-driven vacuum cleaner.
- 1900 – Benjamin Holt invents the first tractor.
- 1902 – Willis Carrier invents the air conditioner.
- 1904 – Thomas Sullivan invents teabags.
- 1906 – William Kellogg invents Cornflakes.
- 1913 – Mary Phelps Jacob invents the bra.
- 1928 – Walter E. Diemer invents bubble gum.
- 1930 – Richard G. Drew patents scotch tape.
- 1930 – Clarence Birdseye patents the frozen food process.
- 1935 – Wallace Carothers and DuPont Labs invents nylon.
- 1946 – Percy Spencer invents the microwave oven.
- 1948 – George de Mestral invents Velcro.
- 1952 – Joseph Woodland and Bernard Silver invent the bar code.

# **INVENTION TIMELINE**

DePaul Center for Urban Education □ 1998

## **INVENTIONS THAT AFFECT EVERYONE**

- 1800 – Alessandro Volta invents the battery.
- 1810 – David Melville patents the first gas light.
- 1835 – Samuel Colt invents the revolver.
- 1839 – Charles Goodyear invents rubber vulcanization.
- 1862 – Dr. Richard Gatling patents the machine gun.
- 1878 – Sir Joseph Swan invents the first practical electric incandescent light bulb.
- 1880 – John Milne invents the modern seismograph.
- 1881 – Alexander Graham Bell invents the metal detector.
- 1887 – Heinrich Hertz invents radar.
- 1888 – Nikola Tesla invents the alternating-current motor.
- 1892 – Rudolf Diesel invents the internal combustion engine.
- 1902 – James Mackenzie invents the polygraph machine.
- 1906 – Lewis Nixon invents sonar.
- 1907 – Leo Baekland invents the first synthetic plastic called Bakelite.
- 1908 – Jacques E. Brandenberger invents cellophane.
- 1913 – Harry Brearly invents stainless steel.
- 1914 – Garret A. Morgan invents the gas mask.
- 1922 – Sir Frederick Grant Banting invents insulin.
- 1923 – Vladimir Kosma Zworykin invents the iconoscope (cathode-ray tube.)
- 1928 – Alexander Fleming discovers penicillin.
- 1931 – Max Knott and Ernst Ruska co-invent the electron microscope.
- 1939 – Oto Frisch, Niels Bohr and Rudolf Peierls invent the atom bomb.
- 1941 – Konrad Zuse invents the first computer controlled by software, the Z3.
- 1942 – John Atanasoff and Clifford Berry built the first electronic digital computer.
- 1954 – Chaplin, Fuller and Pearson invent the solar cell.
- 1958 – Gordon Gould invents the laser.
- 1959 – Kilby and Robert Noyce invent the microchip.
- 1965 – James Russell invents the compact disc.
- 1969 – ARPAnet, the predecessor of the Internet invented.
- 1971 – James Fergason invents the liquid-crystal display (LCD.)
- 1971 – Fagging, Hoff and Mazor invent the microprocessor.
- 1973 – Robert Metcalfe and Xerox invent the Ethernet (local computer network.)
- 1981 – IBM-PC invented.
- 1984 – Apple Macintosh invented.
- 1985 – Microsoft invents the Windows program.
- 1986 – J. George Bednorz and Karl A. Muller invent the high temperature super-conductor.
- 1988 – Christian Andreas Doppler invents the Doppler radar.
- 1990 – Tun Berners-Lee creates the world wide web/internet protocol (HTTP) and www language (HTML.)
- 1995 – DVD (Digital Versatile Disc or Digital Video Disc) invented.