CPC COOPERATIVE PATENT CLASSIFICATION

Y GENERAL TAGGING OF NEW TECHNOLOGICAL DEVELOPMENTS; GENERAL TAGGING OF CROSS-SECTIONAL TECHNOLOGIES SPANNING OVER SEVERAL SECTIONS OF THE IPC; TECHNICAL SUBJECTS COVERED BY FORMER USPC CROSS-REFERENCE ART COLLECTIONS [XRACs] AND DIGESTS (NOTES omitted)

Y02 TECHNOLOGIES OR APPLICATIONS FOR MITIGATION OR ADAPTATION AGAINST CLIMATE CHANGE (NOTES omitted)

Y02E REDUCTION OF GREENHOUSE GAS [GHG] EMISSIONS, RELATED TO ENERGY GENERATION, TRANSMISSION OR DISTRIBUTION

10/00	Energy generation through renewable energy sources	20/30	• Technologies for a more efficient combustion or heat usage
10/10	• Geothermal energy	20/32	• Direct CO ₂ mitigation
10/20	• Hydro energy	20/34	. Indirect CO ₂ mitigation, i.e. by acting on non
10/30	• Energy from the sea, e.g. using wave energy or salinity gradient		CO ₂ directly related matters of the process, e.g. pre- heating or heat recovery
10/40	• Solar thermal energy, e.g. solar towers	30/00	Energy generation of nuclear origin
10/44	• • Heat exchange systems	30/00	Nuclear fusion reactors
10/46	. Conversion of thermal power into mechanical	30/10	Nuclear fission reactors
	power, e.g. Rankine, Stirling or solar thermal	30/30	• Nuclear fission feactors
	engines	40/00	Technologies for an efficient electrical power
10/47	Mountings or tracking		generation, transmission or distribution
10/50	• Photovoltaic [PV] energy	40/10	 Flexible AC transmission systems [FACTS]
10/52	• • PV systems with concentrators	40/20	• Active power filtering [APF]
10/541	CuInSe2 material PV cells	40/30	Reactive power compensation
10/542	Dye sensitized solar cells	40/40	Arrangements for reducing harmonics
10/543	Solar cells from Group II-VI materials	40/50	Arrangements for eliminating or reducing
10/544	Solar cells from Group III-V materials		asymmetry in polyphase networks
10/545	Microcrystalline silicon PV cells	40/60	. Superconducting electric elements or equipment;
10/546	. Polycrystalline silicon PV cells		Power systems integrating superconducting
10/547	Monocrystalline silicon PV cells		elements or equipment
10/548	Amorphous silicon PV cells	40/70	Smart grids as climate change mitigation technology
10/549	• • Organic PV cells		in the energy generation sector
10/56	Power conversion systems, e.g. maximum power point trackers	50/00	Technologies for the production of fuel of non- fossil origin
10/60	• Thermal-PV hybrids	50/10	Biofuels, e.g. bio-diesel
10/70	• Wind energy	50/30	• Fuel from waste, e.g. synthetic alcohol or diesel
10/72	• Wind turbines with rotation axis in wind direction		· · · · · · · · · · · · · · · · · · ·
10/727	• • Offshore wind turbines	60/00	Enabling technologies; Technologies with a
10/728	• Onshore wind turbines		potential or indirect contribution to GHG
10/74	• Wind turbines with rotation axis perpendicular to	60 (A 0	emissions mitigation
	the wind direction	60/10	• Energy storage using batteries
10/76	. Power conversion electric or electronic aspects	60/13	• Energy storage using capacitors
20/00		60/14	• Thermal energy storage
20/00 20/12	 Combustion technologies with mitigation potential Heat utilisation in combustion or incineration of 	60/16	 Mechanical energy storage, e.g. flywheels or pressurised fluids
	waste	60/30	Hydrogen technology
20/14	. Combined heat and power generation [CHP]	60/32	• • Hydrogen storage
20/16	. Combined cycle power plant [CCPP], or combined	60/34	• • Hydrogen distribution
	cycle gas turbine [CCGT]	60/36	Hydrogen production from non-carbon containing
20/18	• Integrated gasification combined cycle [IGCC], e.g. combined with carbon capture and storage [CCS]	60/50	sources, e.g. by water electrolysis Fuel cells

Y02E

. Arrangements for transfer of electric power between	
AC networks or generators via a high voltage DC	
link [HVCD]	

70/00 Other energy conversion or management systems reducing GHG emissions

70/30 • Systems combining energy storage with energy generation of non-fossil origin