## 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)

## Y02P CLIMATE CHANGE MITIGATION TECHNOLOGIES IN THE PRODUCTION OR PROCESSING OF GOODS

## NOTE

This subclass <u>covers</u> climate change mitigation technologies in any kind of industrial processing or production activity, including the agroalimentary industry, agriculture, fishing, ranching and the like.

10/00	Technologies related to metal processing	20/59	Biological synthesis; Biological purification
10/10	<ul> <li>Reduction of greenhouse gas [GHG] emissions</li> </ul>	30/00	Technologies relating to oil refining and
10/122	• • by capturing or storing CO <sub>2</sub>	30/00	petrochemical industry
10/134	• • by avoiding CO <sub>2</sub> , e.g. using hydrogen	30/20	• using bio-feedstock
10/143	• • of methane $[CH_4]$	30/40	Ethylene production
10/146	Perfluorocarbons [PFC]; Hydrofluorocarbons		
	[HFC]; Sulfur hexafluoride [SF <sub>6</sub> ]	40/00	Technologies relating to the processing of minerals
10/20	. Recycling	40/10	• Production of cement, e.g. improving or optimising
10/25	• Process efficiency		the production methods; Cement grinding
10/32	using renewable energy sources	40/121	<ul> <li>Energy efficiency measures, e.g. improving or optimising the production methods</li> </ul>
20/00	Technologies relating to chemical industry	40/125	Fuels from renewable energy sources, e.g. waste
20/10	• Process efficiency		or biomass
20/129	• Energy recovery, e.g. by cogeneration,	40/18	Carbon capture and storage [CCS]
	H <sub>2</sub> recovery or pressure recovery turbines	40/40	<ul> <li>Production or processing of lime, e.g. limestone</li> </ul>
20/133	Renewable energy sources, e.g. sunlight		regeneration of lime in pulp and sugar mills
20/141	• Feedstock	40/45	using fuels from renewable energy sources
20/143	the feedstock being recycled material, e.g. plastics	40/50	<ul> <li>Glass production, e.g. reusing waste heat during</li> </ul>
20/145	the feedstock being materials of biological origin		processing or shaping
20/151	• Reduction of greenhouse gas [GHG] emissions, e.g.	40/57	Improving the yield, e-g- reduction of reject rates
	CO <sub>2</sub>	40/60	<ul> <li>Production of ceramic materials or ceramic</li> </ul>
20/155	. Perfluorocarbons [PFC]; Hydrofluorocarbons		elements, e.g. substitution of clay or shale by
	[HFC]; Hydrochlorofluorocarbons [HCFC]; Chlorofluorocarbons [CFC]		alternative raw materials, e.g. ashes
20/156		60/00	Technologies relating to agriculture, livestock or
20/156 20/20	<ul> <li>Methane [CH<sub>4</sub>]</li> <li>Improvements relating to chlorine production</li> </ul>	00,00	agroalimentary industries
	Improvements relating to chlorine production     Improvements relating to adipic acid or caprolactam	60/12	<ul> <li>using renewable energies, e.g. solar water pumping</li> </ul>
20/30	production	60/14	• Measures for saving energy, e.g. in green houses
20/40	Improvements relating to fluorochloro hydrocarbon,	60/20	• Reduction of greenhouse gas [GHG] emissions in
20/40	e.g. chlorodifluoromethane [HCFC-22] production		agriculture, e.g. CO <sub>2</sub>
20/50	Improvements relating to the production of bulk	60/21	<ul> <li>Dinitrogen oxide [N<sub>2</sub>O], e.g. using aquaponics,</li> </ul>
20/30	chemicals		hydroponics or efficiency measures
20/52	using catalysts, e.g. selective catalysts	60/22	Methane [CH <sub>4</sub> ], e.g. from rice paddies
20/54	<ul> <li>using solvents, e.g. supercritical solvents or ionic</li> </ul>	60/30	Land use policy measures
20/5 !	liquids	60/40	Afforestation or reforestation
20/55	Design of synthesis routes, e.g. reducing the use	60/50	Livestock or poultry management
	of auxiliary or protecting groups	60/52	use of renewable energies
20/582	Recycling of unreacted starting or intermediate	60/60	Fishing; Aquaculture; Aquafarming
	materials		· · ·
20/584	Recycling of catalysts		

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60/80	• Food processing, e.g. use of renewable energies
	or variable speed drives in handling, conveying or
60/85	stacking  • Food storage or conservation, e.g. cooling or
00/03	drying
60/87	Re-use of by-products of food processing for
	fodder production
70/00	Climate change mitigation technologies in
	the production process for final industrial or
	consumer products
70/10	<ul> <li>Greenhouse gas [GHG] capture, material saving, heat recovery or other energy efficient measures, e.g. motor control, characterised by manufacturing processes, e.g. for rolling metal or metal working</li> </ul>
70/50	Manufacturing or production processes     characterised by the final manufactured product
70/62	• related technologies for production or treatment
	of textile or flexible materials or products thereof,
	including footwear
80/00	Climate change mitigation technologies for sector-
	wide applications
80/10	• Efficient use of energy, e.g. using compressed air or pressurized fluid as energy carrier
80/14	District level solutions, i.e. local energy networks
80/15	On-site combined power, heat or cool generation
	or distribution, e.g. combined heat and power
90/20	[CHP] supply
80/20 80/30	<ul><li>using renewable energy</li><li>Reducing waste in manufacturing processes;</li></ul>
80/30	Calculations of released waste quantities
80/40	Minimising material used in manufacturing
	processes
90/00	Enabling technologies with a potential
	contribution to greenhouse gas [GHG] emissions
	mitigation
90/02	. Total factory control, e.g. smart factories, flexible
	manufacturing systems [FMS] or integrated
90/30	manufacturing systems [IMS]  Computing systems specially adapted for
70/30	manufacturing
90/40	• Fuel cell technologies in production processes
90/45	Hydrogen technologies in production processes
90/50	. Energy storage in industry with an added climate
	change mitigation effect
90/60	Electric or hybrid propulsion means for production
90/70	processes  Combining sequestration of CO <sub>2</sub> and exploitation of
70/10	hydrocarbons by injecting $CO_2$ or carbonated water
	in oil wells
90/80	Management or planning
90/82	Energy audits or management systems therefor
90/84	Greenhouse gas [GHG] management systems
90/845	Inventory and reporting systems for greenhouse
00/	gases [GHG]
90/90	. Financial instruments for climate change mitigation,
90/95	<ul> <li>e.g. environmental taxes, subsidies or financing</li> <li>CO<sub>2</sub> emission certificates or credits trading</li> </ul>
ノロノン	• • CO2 chinssion certificates of credits trading

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