# **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)

# Y02A TECHNOLOGIES FOR ADAPTATION TO CLIMATE CHANGE

#### <u>NOTE</u>

This subclass <u>covers</u> technologies for adaptation to climate change, i.e. technologies that allow adapting to the adverse effects of climate change in human, industrial (including agriculture and livestock) and economic activities.

10/00	at coastal zones; at river basins	30/00	Adapting or protecting infrastructure or their
10/11	• Hard structures, e.g. dams, dykes or breakwaters		operation
10/23	. Dune restoration or creation; Cliff stabilisation	30/14	• Extreme weather resilient electric power supply
10/26	Artificial reefs or seaweed; Restoration or		systems, e.g. strengthening power lines or
	protection of coral reefs		underground power cables
10/30	• Flood prevention; Flood or storm water	30/24	• Structural elements or technologies for improving
	management, e.g. using flood barriers	20/242	thermal insulation
10/40	• Controlling or monitoring, e.g. of flood or	30/242	• Slab shaped vacuum insulation
	hurricane; Forecasting, e.g. risk assessment or mapping	30/244	<ul> <li>using natural or recycled building materials, e.g. straw, wool, clay or used tires</li> </ul>
20/00	Water concernation, Efficient water supply	30/249	• • Glazing, e.g. vacuum glazing
	Water conservation; Efficient water supply; Efficient water use	30/254	Roof garden systems; Roof coverings with high solar reflectance
20/108	• Rainwater harvesting	30/27	• Relating to heating, ventilation or air conditioning
20/124	• Water desalination		[HVAC] technologies
20/131	Reverse-osmosis	30/272	• • Solar heating or cooling
20/138	• • using renewable energy	30/274	using waste energy, e.g. from internal combustion
20/141	Wind power		engine
20/142	Solar thermal; Photovoltaics	30/30	• in transportation, e.g. on roads, waterways or
20/144	Wave energy		railways
20/146	• using grey water	30/60	<ul> <li>Planning or developing urban green infrastructure</li> </ul>
20/148	<ul> <li>using household water from wash basins or showers</li> </ul>	40/00	Adaptation technologies in agriculture, forestry,
20/15	. Leakage reduction or detection in water storage or		livestock or agroalimentary production
20/15	• Leakage reduction or detection in water storage or distribution	40/10	• in agriculture
20/15 20/152	с	40/13	<ul><li>in agriculture</li><li>Abiotic stress</li></ul>
	<ul><li>distribution</li><li>Water filtration</li><li>Controlling water pollution; Waste water treatment</li></ul>	40/13 40/132	<ul> <li>in agriculture</li> <li>Abiotic stress</li> <li>Plants tolerant to drought</li> </ul>
20/152	<ul><li>distribution</li><li>Water filtration</li><li>Controlling water pollution; Waste water treatment</li><li>Keeping clear the surface of open water from oil</li></ul>	40/13 40/132 40/135	<ul> <li>in agriculture</li> <li>Abiotic stress</li> <li>Plants tolerant to drought</li> <li>Plants tolerant to salinity</li> </ul>
20/152 20/20	<ul> <li>distribution</li> <li>Water filtration</li> <li>Controlling water pollution; Waste water treatment</li> <li>Keeping clear the surface of open water from oil spills</li> </ul>	40/13 40/132 40/135 40/138	<ul> <li>in agriculture</li> <li>Abiotic stress</li> <li>Plants tolerant to drought</li> <li>Plants tolerant to salinity</li> <li>Plants tolerant to heat</li> </ul>
20/152 20/20 20/204 20/208	<ul> <li>distribution</li> <li>Water filtration</li> <li>Controlling water pollution; Waste water treatment</li> <li>Keeping clear the surface of open water from oil spills</li> <li>Off-grid powered water treatment</li> </ul>	40/13 40/132 40/135	<ul> <li>in agriculture</li> <li>Abiotic stress</li> <li>Plants tolerant to drought</li> <li>Plants tolerant to salinity</li> <li>Plants tolerant to heat</li> <li>Genetically Modified [GMO] plants, e.g.</li> </ul>
20/152 20/20 20/204 20/208 20/211	<ul> <li>distribution</li> <li>Water filtration</li> <li>Controlling water pollution; Waste water treatment</li> <li>Keeping clear the surface of open water from oil spills</li> <li>Off-grid powered water treatment</li> <li>Solar-powered water purification</li> </ul>	40/13 40/132 40/135 40/138 40/146	<ul> <li>in agriculture</li> <li>Abiotic stress</li> <li>Plants tolerant to drought</li> <li>Plants tolerant to salinity</li> <li>Plants tolerant to heat</li> <li>Genetically Modified [GMO] plants, e.g. transgenic plants</li> </ul>
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20/152 20/20 20/204 20/208 20/211 20/212 20/30	<ul> <li>distribution</li> <li>Water filtration</li> <li>Controlling water pollution; Waste water treatment</li> <li>Keeping clear the surface of open water from oil spills</li> <li>Off-grid powered water treatment</li> <li>Solar-powered water purification</li> <li>Solar-powered wastewater sewage treatment, e.g. spray evaporation</li> <li>Relating to industrial water supply, e.g. used for cooling</li> </ul>	40/13 40/132 40/135 40/138 40/146 40/20	<ul> <li>in agriculture</li> <li>Abiotic stress</li> <li>Plants tolerant to drought</li> <li>Plants tolerant to salinity</li> <li>Plants tolerant to heat</li> <li>Genetically Modified [GMO] plants, e.g. transgenic plants</li> <li>Fertilizers of biological origin, e.g. guano or fertilizers made from animal corpses</li> <li>Improving land use; Improving water use or availability; Controlling erosion</li> </ul>
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20/152 20/20 20/204 20/208 20/211 20/212 20/30 20/40 20/402	<ul> <li>distribution</li> <li>Water filtration</li> <li>Controlling water pollution; Waste water treatment</li> <li>Keeping clear the surface of open water from oil spills</li> <li>Off-grid powered water treatment</li> <li>Solar-powered water purification</li> <li>Solar-powered water sewage treatment, e.g. spray evaporation</li> <li>Relating to industrial water supply, e.g. used for cooling</li> <li>Protecting water resources</li> <li>River restoration</li> </ul>	40/13 40/132 40/135 40/138 40/146 40/20 40/22	<ul> <li>in agriculture</li> <li>Abiotic stress</li> <li>Plants tolerant to drought</li> <li>Plants tolerant to salinity</li> <li>Plants tolerant to heat</li> <li>Genetically Modified [GMO] plants, e.g. transgenic plants</li> <li>Fertilizers of biological origin, e.g. guano or fertilizers made from animal corpses</li> <li>Improving land use; Improving water use or availability; Controlling erosion</li> <li>Greenhouse technology, e.g. cooling systems</li> </ul>
20/152 20/20 20/204 20/208 20/211 20/212 20/30 20/40 20/402 20/404	<ul> <li>distribution</li> <li>Water filtration</li> <li>Controlling water pollution; Waste water treatment</li> <li>Keeping clear the surface of open water from oil spills</li> <li>Off-grid powered water treatment</li> <li>Solar-powered water purification</li> <li>Solar-powered water sewage treatment, e.g. spray evaporation</li> <li>Relating to industrial water supply, e.g. used for cooling</li> <li>Protecting water resources</li> <li>River restoration</li> <li>Saltwater intrusion barriers</li> </ul>	40/13 40/132 40/135 40/138 40/146 40/20 40/22 40/25	<ul> <li>in agriculture</li> <li>Abiotic stress</li> <li>Plants tolerant to drought</li> <li>Plants tolerant to salinity</li> <li>Plants tolerant to heat</li> <li>Genetically Modified [GMO] plants, e.g. transgenic plants</li> <li>Fertilizers of biological origin, e.g. guano or fertilizers made from animal corpses</li> <li>Improving land use; Improving water use or availability; Controlling erosion</li> <li>Greenhouse technology, e.g. cooling systems therefor</li> </ul>
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20/152 20/20 20/204 20/208 20/211 20/212 20/30 20/40 20/402 20/404 20/406	<ul> <li>distribution</li> <li>Water filtration</li> <li>Controlling water pollution; Waste water treatment</li> <li>Keeping clear the surface of open water from oil spills</li> <li>Off-grid powered water treatment</li> <li>Solar-powered water purification</li> <li>Solar-powered water sewage treatment, e.g. spray evaporation</li> <li>Relating to industrial water supply, e.g. used for cooling</li> <li>Protecting water resources</li> <li>River restoration</li> <li>Saltwater intrusion barriers</li> <li>Aquifer recharge</li> </ul>	40/13 40/132 40/135 40/138 40/146 40/20 40/22 40/22 40/25 40/28 40/51	<ul> <li>in agriculture</li> <li>Abiotic stress</li> <li>Plants tolerant to drought</li> <li>Plants tolerant to salinity</li> <li>Plants tolerant to heat</li> <li>Genetically Modified [GMO] plants, e.g. transgenic plants</li> <li>Fertilizers of biological origin, e.g. guano or fertilizers made from animal corpses</li> <li>Improving land use; Improving water use or availability; Controlling erosion</li> <li>Greenhouse technology, e.g. cooling systems therefor</li> <li>specially adapted for farming</li> <li>specially adapted for storing agricultural or horticultural products</li> </ul>

### Y02A

40/70	• in livestock or poultry
40/76	• • using renewable energy
40/80	• in fisheries management
40/81	• • Aquaculture, e.g. of fish
40/818	Alternative feeds for fish, e.g. in aquacultures
40/90	• in food processing or handling, e.g. food
	conservation
40/924	• • using renewable energies
40/926	• • Cooking stoves or furnaces using solar heat
40/928	Cooking stoves using biomass
40/963	• • Off-grid food refrigeration
40/966	Powered by renewable energy sources
50/00	in human health protection, e.g. against extreme
	weather
50/20	Air quality improvement or preservation or
50/20	• Air quality improvement or preservation, e.g. vehicle emission control or emission reduction by using catalytic converters
50/2351	vehicle emission control or emission reduction by
	<ul> <li>vehicle emission control or emission reduction by using catalytic converters</li> <li>Atmospheric particulate matter [PM], e.g. carbon smoke microparticles, smog, aerosol particles,</li> </ul>
50/2351	<ul> <li>vehicle emission control or emission reduction by using catalytic converters</li> <li>Atmospheric particulate matter [PM], e.g. carbon smoke microparticles, smog, aerosol particles, dust</li> <li>Against vector-borne diseases, e.g. mosquito-borne, fly-borne, tick-borne or waterborne diseases whose impact is exacerbated by climate change</li> <li>Technologies having an indirect contribution to</li> </ul>
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50/2351 50/30 <b>90/00</b>	<ul> <li>vehicle emission control or emission reduction by using catalytic converters</li> <li>Atmospheric particulate matter [PM], e.g. carbon smoke microparticles, smog, aerosol particles, dust</li> <li>Against vector-borne diseases, e.g. mosquito-borne, fly-borne, tick-borne or waterborne diseases whose impact is exacerbated by climate change</li> <li>Technologies having an indirect contribution to adaptation to climate change</li> <li>Information and communication technologies [ICT] supporting adaptation to climate change, e.g. for</li> </ul>