

# 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)

## Y02T CLIMATE CHANGE MITIGATION TECHNOLOGIES RELATED TO TRANSPORTATION

<b>10/00</b>	<b>Road transport of goods or passengers</b>	50/80	. Energy efficient operational measures, e.g. ground operations or mission management
10/10	. Internal combustion engine [ICE] based vehicles		
10/12	. . Improving ICE efficiencies	<b>70/00</b>	<b>Maritime or waterways transport</b>
10/30	. . Use of alternative fuels, e.g. biofuels	70/10	. Measures concerning design or construction of watercraft hulls
10/40	. . Engine management systems	70/50	. Measures to reduce greenhouse gas emissions related to the propulsion system
10/60	. Other road transportation technologies with climate change mitigation effect	70/5218	. . Less carbon-intensive fuels, e.g. natural gas, biofuels
10/62	. . Hybrid vehicles	70/5236	. . . Renewable or hybrid-electric solutions
10/64	. . Electric machine technologies in electromobility	<b>90/00</b>	<b>Enabling technologies or technologies with a potential or indirect contribution to GHG emissions mitigation</b>
10/70	. . Energy storage systems for electromobility, e.g. batteries	90/10	. Technologies relating to charging of electric vehicles
10/7072	. . Electromobility specific charging systems or methods for batteries, ultracapacitors, supercapacitors or double-layer capacitors	90/12	. . Electric charging stations
10/72	. . Electric energy management in electromobility	90/14	. . Plug-in electric vehicles
10/80	. Technologies aiming to reduce greenhouse gasses emissions common to all road transportation technologies	90/16	. . Information or communication technologies improving the operation of electric vehicles
10/82	. . Elements for improving aerodynamics	90/167	. . . Systems integrating technologies related to power network operation and communication or information technologies for supporting the interoperability of electric or hybrid vehicles, i.e. smartgrids as interface for battery charging of electric vehicles [EV] or hybrid vehicles [HEV]
10/84	. . Data processing systems or methods, management, administration		<b>NOTE</b>
10/86	. . Optimisation of rolling resistance, e.g. weight reduction		Documents tagged under <a href="#">Y02T 90/167</a> are concurrently tagged also under <a href="#">Y04S 30/10</a>
10/88	. . Optimized components or subsystems, e.g. lighting, actively controlled glasses	90/40	. Application of hydrogen technology to transportation, e.g. using fuel cells
10/90	. . Energy harvesting concepts as power supply for auxiliaries' energy consumption, e.g. photovoltaic sun-roof		
10/92	. . Energy efficient charging or discharging systems for batteries, ultracapacitors, supercapacitors or double-layer capacitors specially adapted for vehicles		
<b>30/00</b>	<b>Transportation of goods or passengers via railways, e.g. energy recovery or reducing air resistance</b>		
<b>50/00</b>	<b>Aeronautics or air transport</b>		
50/10	. Drag reduction		
50/30	. Wing lift efficiency		
50/40	. Weight reduction		
50/50	. On board measures aiming to increase energy efficiency		
50/60	. Efficient propulsion technologies, e.g. for aircraft		
50/678	. . Aviation using fuels of non-fossil origin		