

CPC COOPERATIVE PATENT CLASSIFICATION

B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

TRANSPORTING

B64 AIRCRAFT; AVIATION; COSMONAUTICS

B64D EQUIPMENT FOR FITTING IN OR TO AIRCRAFT; FLYING SUITS; PARACHUTES; ARRANGEMENTS OR MOUNTING OF POWER PLANTS OR PROPULSION TRANSMISSIONS IN AIRCRAFT

WARNING

The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

B64D 15/18	covered by	B64D 15/16
B64D 25/102	covered by	B64D 25/10
B64D 25/105	covered by	B64D 25/10
B64D 25/108	covered by	B64D 25/10
B64D 25/11	covered by	B64D 25/10
B64D 25/112	covered by	B64D 25/10
B64D 25/115	covered by	B64D 25/10
B64D 25/118	covered by	B64D 25/10

1/00	Dropping, ejecting, releasing, or receiving articles, liquids, or the like, in flight (with respect to weapon sights devices F41G takes precedence, parachutes per se B64D 17/00; ejectable seats B64D 25/10; ejectable capsules B64D 25/12; refuelling during flight B64D 39/00; launching apparatus for projecting projectiles or missiles F41F 1/00, F41F 7/00; rocket or torpedo launchers F41F 3/00)	7/00	Arrangements of military equipment, e.g. armaments, armament accessories, or military shielding, in aircraft; Adaptations of armament mountings for aircraft (dropping bombs or the like B64D 1/00; armaments or mountings therefor per se F41)
1/02	. Dropping, ejecting, or releasing articles (jettisonable fuel reservoirs B64D 37/12)	7/02	. the armaments being firearms
1/04	. . the articles being explosive, e.g. bombs (arming or setting bomb fuzes F42C)	7/04	. . fixedly mounted
1/06	. . . Bomb releasing; Bombs doors	7/06	. . movably mounted
1/08	. . the articles being load-carrying devices	7/08	. Arrangements of rocket launchers {or releasing means} (rocket launchers per se, e.g. rocket pods, F41F 3/06)
1/10	. . . Stowage arrangements for the devices in aircraft	9/00	Equipment for handling freight; Equipment for facilitating passenger embarkation or the like (emergency equipment B64D 17/00, B64D 19/00, B64D 25/00; structures integral with fuselage to facilitate loading, fuselage floors specially adapted for freight, steps mounted on and retractable within aircraft B64C; ground installations B64F)
1/12	. . . Releasing	9/003	. {Devices for retaining pallets or freight containers (securing freight containers on vehicles B60P 7/00)}
1/14	. . . Absorbing landing shocks	2009/006	. {Rollers or drives for pallets of freight containers, e.g. PDU}
1/16	. Dropping or releasing powdered, liquid, or gaseous matter, e.g. for fire-fighting (jettisoning fuel B64D 37/26)	10/00	Flying suits (helmets in general A42B 3/00; breathing helmets A62B 18/00)
1/18	. . by spraying, e.g. insecticides (spraying apparatus per se B05B)	2010/002	. {Anti-g suits or garments}
1/20	. . for sky-writing	2010/005	. {High altitude suits or garments, e.g. partial or total pressure}
1/22	. Taking-up articles from earth's surface	2010/007	. {Suits with cooling or heating means}
3/00	Aircraft adaptations to facilitate towing or being towed (B64D 39/00 takes precedence)	11/00	Passenger or crew accommodation; Flight-deck installations not otherwise provided for
3/02	. for towing targets	11/0007	. {Devices specially adapted for food or beverage distribution services}
5/00	Aircraft transported by aircraft, e.g. for release or reberthing during flight (flying units formed by separate aircraft B64C 37/02)		

11/0015	. {Arrangements for entertainment or communications, e.g. radio, television}	11/0606	. . {with privacy shells, screens, separators or the like (class dividers B64D 11/0023)}
	WARNING	11/0607	. . {with devices specially adapted for exercising during travel; with devices specially adapted to prevent thrombosis}
	Groups B64D 11/00151 - B64D 11/00155 are incomplete pending reclassification of documents from group B64D 11/0015 .	11/0611	. . {with means for holding the passenger in a standing position}
	Until reclassification is complete, groups B64D 11/00151 - B64D 11/00155 and B64D 11/0015 should be considered in order to perform a complete search.	11/0612	. . {specially adapted for children}
11/00151	. . {Permanently mounted seat back monitors}	11/0616	. . {with ejection means}
11/00152	. . {Seat back fixtures for removable monitors, e.g. tablet computers}	11/0619	. . {with energy absorbing means specially adapted for mitigating impact loads for passenger seats, e.g. at a crash}
11/00153	. . {Monitors mounted on or in the seat other than the seat back}	11/062	. . {Belts or other passenger restraint means for passenger seats}
11/00154	. . {Loudspeakers mounted in the seat back}	11/06205	. . . {Arrangements of airbags}
11/00155	. . {Individual entertainment or communication system remote controls therefor, located in or connected to seat components, e.g. to seat back or arm rest}	11/0621	. . . . {Airbag initiation or activation means}
11/0023	. {Movable or removable cabin dividers, e.g. for class separation (bulkheads B64C 1/10)}	11/0624	. . {Arrangements of electrical connectors, e.g. for earphone, internet or electric supply}
11/003	. {Stowage devices for passengers' personal luggage}	11/0626	. . {with individual temperature or ventilation control}
2011/0038	. {Illumination systems for cabins as a whole}	11/0627	. . {Seats combined with storage means}
2011/0046	. {Modular or preassembled units for creating cabin interior structures}	11/0629	. . . {the storage means being specially adapted for emergency equipment}
2011/0053	. {Cabin passenger reading lights}		WARNING
2011/0061	. {Windows displaying outside view, artificially generated}		Groups B64D 11/0631 - B64D 11/0633 is/are incomplete pending reclassification of documents from group B64D 11/0629 .
2011/0069	. {Rest berths, beds or the like}		Until reclassification is complete, groups B64D 11/0631 - B64D 11/0633 and B64D 11/0629 should be considered in order to perform a complete search.
2011/0076	. . {for crew members, e.g. for sleeping during flight}	11/0631	. . . . {for life vests}
2011/0084	. . {Bed units for passengers attached to the ceiling of the fuselage}	11/0632	. . . . {for breathing apparatus}
2011/0092	. . {Arrangements for mounting stretchers in aircraft cabins}	11/0633	. . . . {for devices other than life vests and intended for external use, e.g. parachutes or life rafts}
11/02	. Toilet fittings (of general application A47K)	11/0636	. . . {Personal storage means or waste disposal bags}
11/04	. Galleys	11/0638	. . {with foldable tables, trays or cup holders}
11/06	. {Arrangements of seats, or adaptations or details specially adapted for aircraft seats (crew seat constructions for emergency purposes B64D 25/04)}	11/0639	. . {with features for adjustment or converting of seats}
	WARNING	11/06395	. . . {characterised by the arrangement of electric motors for adjustment}
	Groups B64D 11/0601 - B64D 11/0698 are incomplete pending reclassification of documents from group B64D 11/06 .	11/064	. . . {Adjustable inclination or position of seats}
	Until reclassification is complete, groups B64D 11/0601 - B64D 11/0698 and B64D 11/06 should be considered in order to perform a complete search.	11/0641	. . . {Seats convertible into beds}
11/0601	. . {Arrangement of seats for non-standard seating layouts, e.g. seats staggered horizontally or vertically, arranged in an angled or fishbone layout, or facing in other directions than the direction of flight}	11/0642	. . . {Adjustable headrests}
11/0602	. . {Seat modules, i.e. seat systems including furniture separate from the seat itself}	11/0643	. . . {Adjustable foot or leg rests}
11/0604	. . . {including a bed, e.g. cocoon type passenger seat modules}	11/0644	. . . {Adjustable arm rests}
11/0605	. . . {including tables or desks}	11/0646	. . {Seats characterised by special features of stationary arms, foot or head rests}
		11/0647	. . {Seats characterised by special upholstery or cushioning features}
		11/0648	. . {Lower frame constructions}
		11/0649	. . {Seats characterised by special features for reducing weight}
		11/0689	. . {specially adapted for pilots}
		11/0691	. . {specially adapted for cabin crew}
		11/0693	. . {Width modification of seat assemblies, e.g. for class modification}
		11/0696	. . {Means for fastening seats to floors, e.g. to floor rails}
		11/0697	. . {Seats suspended from aircraft ceiling}

11/0698	. . {Seats suspended from aircraft walls}	15/14	. . controlled cyclically along length of surface
13/00	Arrangements or adaptations of air-treatment apparatus for aircraft crew or passenger, or freight space; (or structural parts of the aircraft) (treatment rooms with artificial climate for medical purposes A61G 10/02; respiratory apparatus in general A62B; for for vehicles in general B60H)	15/16	. by mechanical means
2013/003	. {Cabin ventilation nozzles}	15/163	. . {using electro-impulsive devices}
13/006	. {the air being used to cool structural parts of the aircraft}	15/166	. . {using pneumatic boots}
13/02	. the air being pressurised	15/20	. Means for detecting icing or initiating de-icing
13/04	. . Automatic control of pressure	15/22	. . Automatic initiation by icing detector
13/06	. the air being conditioned (pressurising B64D 13/02)	17/00	Parachutes (non canopied parachutes B64D 19/00)
2013/0603	. . {Environmental Control Systems}	17/02	. Canopy arrangement or construction
2013/0607	. . . {providing hot air or liquid for deicing aircraft parts, e.g. aerodynamic surfaces or windows}		NOTE
2013/0611	. . . {combined with auxiliary power units (APU's)}		B64D 17/025 takes precedence over
2013/0614	. . . {with subsystems for cooling avionics}		B64D 17/04 - B64D 17/18
2013/0618	. . . {with arrangements for reducing or managing bleed air, using another air source, e.g. ram air}	17/025	. . {for gliding chutes}
2013/0622	. . . {used in combination with boundary layer control systems}	17/04	. . formed with two or more canopies arranged about a common axis
2013/0625	. . . {comprising means for distribution effusion of conditioned air in the cabin}	17/06	. . formed with two or more canopies arranged in a cluster
2013/0629	. . . {with subsystems for cooling food, catering or special loads}	17/08	. . Secondary or shock-absorbing canopies attached to load line
2013/0633	. . . {including chemical reaction-based thermal management systems}	17/10	. . Ribbon construction or the like
2013/0637	. . . {with CO ₂ removers}	17/12	. . constructed to provide variable or non-uniform porosity over area of canopy
2013/064	. . . {comprising more than one system, e.g. dual systems}	17/14	. . with skirt or air-deflecting panels
2013/0644	. . . {including electric motors or generators}	17/16	. . . secured to hem of main canopy
2013/0648	. . . {with energy recovery means, e.g. using turbines}	17/18	. . Vent arrangement or construction
2013/0651	. . . {comprising filters, e.g. dust filters}	17/20	. . . variable in area
2013/0655	. . . {with zone or personal climate controls}	17/22	. Load suspension
2013/0659	. . . {comprising provisions for cooling fuel systems}	17/24	. . Rigging lines
2013/0662	. . . {with humidity control}	17/26	. . . attached to hem of canopy
2013/0666	. . . {with means for preventing icing within the ECS components}	17/28	. . . attached to apex of canopy
2013/067	. . . {with air ionizers}	17/30	. . Harnesses (harnesses per se A62B)
2013/0674	. . . {comprising liquid subsystems}	17/32	. . . Construction of quick-release box
2013/0677	. . . {comprising on board oxygen generator systems}	17/34	. . adapted to control direction or rate of descent
2013/0681	. . . {with oxygen control}	17/343	. . . {by reefing means}
2013/0685	. . . {with ozone control}	17/346	. . . {by anti-squid lines}
2013/0688	. . . {with means for recirculating cabin air}	17/36	. . incorporating friction devices or frangible connections to reduce shock loading of canopy (B64D 17/343 , B64D 17/346 take precedence)
2013/0692	. . . {with special provisions against smoke from cigarettes}	17/38	. . Releasable fastening devices between parachute and load or pack
2013/0696	. . . {with provisions for starting power plants}	17/383	. . . {Cargo release hooks}
13/08	. . the air being heated or cooled	17/386	. . . {Devices adapted to cut lines or straps}
15/00	De-icing or preventing icing on exterior surfaces of aircraft (motor vehicles specially adapted for carrying de-icing equipment B60P)	17/40	. Packs
15/02	. by ducted hot gas or liquid	17/42	. . rigid
15/04	. . Hot gas application	17/44	. . . forming part of load
15/06	. . Liquid application (in general B05)	17/46	. . Closing means
15/08	. . . exuded from surface	17/48	. . with separate pack for extractor of auxiliary parachute
15/10	. . . sprayed over surface	17/50	. . formed with separate compartments for main canopy, rigging lines, or auxiliary parachute
15/12	. by electric heating (electric heating elements in general H05B)	17/52	. . Opening, e.g. manual
		17/54	. . . automatic
		17/56	. . . . responsive to barometric pressure
		17/58	. . . . responsive to time-delay mechanism
		17/60	. . . . by static line
		17/62	. Deployment
		17/64	. . by extractor parachute
		17/66	. . . attached to hem of main canopy
		17/68	. . . attached to apex of main canopy
		17/70	. . by springs
		17/72	. . by explosive or inflatable means

17/725	. . . {by explosive means}	2027/266	. . . {comprising suspension arrangements for supporting vertical loads}
17/74	. . Sequential deployment of a plurality of canopies	2027/268	. . . {comprising thrust links}
17/76	. . facilitated by method of folding or packing		
17/78	. in association with other load-retarding apparatus	29/00	Power-plant nacelles, fairings, or cowlings (nacelles not otherwise provided for B64C)
17/80	. in association with aircraft, e.g. for braking thereof	29/02	. associated with wings (wings adapted for mounting power plant B64C)
19/00	Non-canopied parachutes	29/04	. associated with fuselages
19/02	. Rotary-wing parachutes	29/06	. Attaching of nacelles, fairings or cowlings
21/00	Testing of parachutes	29/08	. Inspection panels for power plants
23/00	Training of parachutists		
25/00	Emergency apparatus or devices, not otherwise provided for (parachutes B64D 17/00 , B64D 19/00 ; jettisoning of fuel tanks or fuel per se B64D 37/00 ; {specially adapted for protection against criminal attack, e.g. anti-hijacking systems B64D 45/0015 } ; safety belts or body harnesses in general A62B 35/00 ; safety belts or body harnesses for land vehicles B60R 22/00 ; jettisonable parts of fuselage facilitating emergency escape B64C)	31/00	Power plant control; Arrangement thereof ({ F02 takes precedence} flying controls B64C)
25/02	. Supports or holding means for living bodies	31/02	. Initiating means
25/04	. . Seat modifications	31/04	. . actuated personally
25/06	. . Harnessing	31/06	. . actuated automatically
25/08	. Ejecting or escaping means (escape apertures B64C)	31/08	. . . for keeping cruising speed constant (conjoint control of power plant and propeller B64C)
25/10	. . Ejector seats	31/10	. . . for preventing asymmetric thrust upon failure of one power plant
25/12	. . Ejectable capsules	31/12	. . . for equalising or synchronising power plants
25/14	. . Inflatable escape chutes	31/14	. Transmitting means between initiating means and power plants
25/16	. . Dinghy stowage		
25/18	. . Flotation gear (aircraft alighting gear B64C)	33/00	Arrangements in aircraft of power plant parts or auxiliaries not otherwise provided for
25/20	. . Releasing of crash position indicators	33/02	. of combustion air intakes (air intakes for gas-turbine plants or jet-propulsion plants per se F02C 7/04 ; air intakes for combustion engines in general F02M 35/00)
27/00	Arrangement or mounting of power plant in aircraft; Aircraft characterised thereby (attitude, flight direction, or altitude control of aircraft by jet reaction B64C)	2033/0206	. . {comprising noise reduction means, e.g. acoustic liners}
2027/005	. {Aircraft with an unducted turbofan comprising contra-rotating rotors, e.g. contra-rotating open rotors [CROR]}	2033/0213	. . {specially adapted for auxiliary power units (APU's)}
27/02	. Aircraft characterised by the type or position of power plant (fuselages or wings adapted for mounting power plant B64C)	2033/022	. . {comprising bird or foreign object protections}
27/023	. . {of rocket type, e.g. for assisting taking-off or braking}	2033/0226	. . {comprising boundary layer control means}
2027/026	. . {comprising different types of power plants, e.g. combination of an electric motor and a gas-turbines}	2033/0233	. . {comprising de-icing means}
27/04	. . of piston type	2033/024	. . {comprising cooling means}
27/06	. . . within or attached to wing	2033/0246	. . {comprising particle separators}
27/08	. . . within or attached to fuselage	2033/0253	. . {specially adapted for particular type of aircraft}
27/10	. . of gas-turbine type (B64D 27/16 takes precedence)	2033/026	. . . {for supersonic or hypersonic aircraft}
27/12	. . . within or attached to wing	2033/0266	. . {specially adapted for particular type of power plants}
27/14	. . . within or attached to fuselage	2033/0273	. . . {for jet engines}
27/16	. . of jet type	2033/028	. . . {for piston engines}
27/18	. . . within or attached to wing	2033/0286	. . . {for turbofan engines}
27/20	. . . within or attached to fuselage	2033/0293	. . . {for turboprop engines}
27/22	. . using atomic energy	33/04	. of exhaust outlets or jet pipes (exhaust outlets for combustion engines in general F01N ; jet pipes or nozzles for jet-propulsion plants per se F02K ; plants characterised by the form or arrangement of the jet pipe or nozzle F02K { ; attitude, flight direction, or altitude control by jet reaction B64C })
27/24	. . using steam, electricity, or spring force (B64D 27/16 takes precedence)	2033/045	. . {comprising infrared suppressors}
27/26	. Aircraft characterised by construction of power-plant mounting	33/06	. . {Silencing exhaust or propulsion jets (ground installations B64F)}
2027/262	. . {Engine support arrangements or elements}	33/08	. of power plant cooling systems (cooling of internal-combustion engines per se F01P ; cooling of gas-turbine plants or jet-propulsion plants per se F02C , F02K)
2027/264	. . . {comprising box like supporting frames}	33/10	. . Radiator arrangement
		33/12	. . . of retractable type

35/00	Transmitting power from power plant to propellers or rotors; Arrangements of transmissions (propellers or rotors per se , helicopter transmissions B64C)	2045/001	. . {for indicating symmetry of flaps deflection}
35/02	. characterised by the type of power plant	45/0015	. {Devices specially adapted for the protection against criminal attack, e.g. anti-hijacking systems}
35/04	. characterised by the transmission driving a plurality of propellers or rotors	2045/002	. . {by disabling or restraining attackers}
35/06	. . the propellers or rotors being counter-rotating	2045/0025	. . . {by spraying gases in cabins, or by shooting darts with anesthetic effects}
35/08	. characterised by the transmission being driven by a plurality of power plants	2045/003	. . {by monitoring cabins}
37/00	Arrangements in connection with fuel supply for power plant (refuelling during flight B64D 39/00)	2045/0035	. . . {using cameras}
37/005	. {Accessories not provided for in the groups B64D 37/02 - B64D 37/28 }	2045/004	. . . {detecting passenger or pilot behaviors by sensors, e.g. biometrics}
37/02	. Tanks (tanks constructed integrally with aircraft wings B64C ; shape or construction of tanks per se B65D)	2045/0045	. . {by communicating emergency situations to ground control, or between crew members}
37/04	. . Arrangement thereof in or on aircraft	2045/005	. . {by protecting cabin or luggage from bombs}
37/06	. . Constructional adaptations thereof	2045/0055	. . {by overriding pilot's controls, or by directing aircraft from ground control to avoid certain paths or zones}
37/08	. . . Internal partitioning	2045/006	. . {by avoiding the use of electronic equipment during flight, e.g. of mobile phones or laptops}
37/10	. . . to facilitate fuel pressurisation	2045/0065	. {Black boxes, devices automatically broadcasting distress signals}
37/12	. . . jettisonable	2045/007	. {Indicators or signs in the cabin, e.g. exit signs or seat numbering}
37/14	. . Filling or emptying (transferring fuels to adjust aircraft trim B64C)	2045/0075	. {Adaptations for use of electronic flight bags in aircraft; Supports therefor in the cockpit}
37/16	. . . Filling systems (ground installations for fuelling aircraft B64F)	2045/008	. {Devices for detecting or indicating hard landing}
37/18	. . . . Conditioning fuel during filling	2045/0085	. {Devices for aircraft health monitoring, e.g. monitoring flutter or vibration}
37/20	. . . . Emptying systems	2045/009	. {Fire detection or protection; Erosion protection, e.g. from airborne particles}
37/22	. . . . facilitating emptying in any position of tank	2045/0095	. {Devices specially adapted to avoid bird strike}
37/24	. . . . using gas pressure	45/02	. Lightning protectors; Static dischargers (in general H01T)
37/26	. . . . Jettisoning of fuel	45/04	. Landing aids; Safety measures to prevent collision with earth's surface
37/28	. . . . Control thereof	45/06	. . mechanical
37/30	. Fuel systems for specific fuels	45/08	. . optical
37/32	. Safety measures not otherwise provided for, e.g. preventing explosive conditions (extinguishing or preventing fires in aircraft A62C)	47/00	Equipment not otherwise provided for
2037/325	. . {Fuel tanks with provisions for reduction hydraulic ram shocks due to projectile impacts}	47/02	. Arrangements or adaptations of signal or lighting devices
37/34	. Conditioning fuel, e.g. heating (during filling B64D 37/18)	47/04	. . the lighting devices being primarily intended to illuminate the way ahead
39/00	Refuelling during flight (filling or emptying fuel tanks B64D 37/14)	47/06	. . for indicating aircraft presence
39/02	. Means for paying-in or out hose	47/08	. Arrangements of cameras
39/04	. Adaptations of hose construction (pipes in general F16L)	2201/00	Airbags mounted in aircraft for any use
39/06	. Connecting hose to aircraft; Disconnecting hose therefrom	2203/00	Aircraft or airfield lights using LEDs
41/00	Power installations for auxiliary purposes	2205/00	Aircraft with means for ground manoeuvring, such as taxiing, using an auxiliary thrust system, e.g. jet-engines, propellers or compressed air
2041/002	. {Mounting arrangements for auxiliary power units (APU's)}	2211/00	Arrangements of solar panels on aircraft
2041/005	. {Fuel cells}	2221/00	Electric power distribution systems onboard aircraft
41/007	. {Ram air turbines}	2231/00	Emergency oxygen systems
43/00	Arrangements or adaptations of instruments (arrangements of cameras B64D 47/08 ; aeronautical measuring instruments per se G01C)	2231/02	. Supply or distribution systems
43/02	. for indicating aircraft speed or stalling conditions	2231/025	. . Oxygen masks; Mask storages (seats combined with storage means, said storage means being specially adapted for emergency equipment B64D 11/0629); Features related to mask deployment
45/00	Aircraft indicators or protectors not otherwise provided for (camouflage F41H 3/00)	2241/00	NACA type air intakes
45/0005	. {Devices specially adapted to indicate the position of a movable element of the aircraft, e.g. landing gear}		