EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 734

DATE: AUGUSUT 1, 2019

PROJECT MP0446

The following classification changes will be effected by this Notice of Changes:

Action	Subclass	Group(s)
SCHEME:		
Titles Changed:	F05C	2203/0865
	F16B	5/0084
		37/08
	F25J	1/00, 1/0002, 1/003, 1/0032, 1/0047, 1/006, 1/008, 1/02, 1/0203, 1/0211, 1/0243
		3/00, 3/02, 3/0204, 3/0228, 3/04, 3/04006, 3/04151, 3/04406, 3/04436, 3/04472, 3/04521, 3/04648, 3/04763, 3/06, 3/0605, 3/063
		2200/00
		2205/00
		2210/00
		2215/00
		2220/00
		2230/00
		2235/00
		2240/00
		2245/00
		2250/00
		2260/00
		2270/00
		2280/00
		2290/00
	F28D	9/02
	Y02C	10/00
		20/00

No other subclasses/groups are impacted by this Notice of Changes.

This Notice of Changes includes the following *[Check the ones included]:*

1. CLASSIFICATION SCHEME CHANGES

☒ A. New, Modified or Deleted Group(s)

☐ B. New, Modified or Deleted Warning(s)

☐ C. New, Modified or Deleted Note(s)

☐ D. New, Modified or Deleted Guidance Heading(s)

2. DEFINITIONS

☐ A. New or Modified Definitions (Full definition template)

☐ B. Modified or Deleted Definitions (Definitions Quick Fix)

3. ☐ REVISION CONCORDANCE LIST (RCL)

4. ☐ CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)

5. ☐ CHANGES TO THE CROSS-REFERENCE LIST (CRL)

1. CLASSIFICATION SCHEME CHANGES

    A. New, Modified or Deleted Group(s)

SUBCLASS F05C - INDEXING SCHEME RELATING TO MATERIALS, MATERIAL PROPERTIES OR MATERIAL CHARACTERISTICS FOR MACHINES, ENGINES OR PUMPS OTHER THAN NON-POSITIVE-DISPLACEMENT MACHINES OR ENGINES

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
M	F05C 2203/0865	2	Oxide ceramics	

SUBCLASS F16B - DEVICES FOR FASTENING OR SECURING CONSTRUCTIONAL ELEMENTS OR MACHINE PARTS TOGETHER, e.g. NAILS, BOLTS, CIRCLIPS, CLAMPS, CLIPS, WEDGES, JOINTS OR JOINTING (couplings for transmitting rotation F16D)

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
M	F16B 5/0084	2	{characterised by particular locking means}	
M	F16B 37/08	1	Quickly-detachable {or mountable} nuts, e.g. consisting of two or more parts; Nuts movable along the bolt after tilting the nut	

SUBCLASS F25J - LIQUEFACTION, SOLIDIFICATION OR SEPARATION OF GASES OR GASEOUS {OR LIQUEFIED GASEOUS} MIXTURES BY PRESSURE AND COLD TREATMENT {OR BY BRINGING THEM INTO THE SUPERCRITICAL STATE (cryogenic pumps F04B37/08; gas storage vessels, gas holders F17; filing vessels with, or discharging from vessels, compressed, liquefied or solidified gases F17C; refrigeration machines, plants, or systems F25B)}

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
M	F25J 1/00	0	Processes or apparatus for liquefying or solidifying gases or gaseous mixtures {(recovering volatile solvents by condensation B01D5/00; vapor recovery systems combined with filling nozzles B67D7/54; solidification of carbonic acid C01B32/55; for ammonia in general C01C1/00)}	
M	F25J 1/0002	1	{characterised by the fluid to be liquefied}	
M	F25J 1/003	1	{characterised by the kind of cold generation within the liquefaction unit for compensating heat leaks and liquid production}	
M	F25J 1/0032	2	{using the feed stream itself or separated fractions from it, i.e. "internal refrigeration"}	
M	F25J 1/0047	2	{using an "external" refrigerant stream in a closed vapor compression cycle (F25J1/0221, F25J1/0225 take precedence)}	
M	F25J 1/006	1	{characterised by the refrigerant fluid used (refrigerants in vapor compression cycles F25B9/002, refrigerant materials per se C09K5/00)}	
M	F25J 1/008	2	{Hydrocarbons}	
M	F25J 1/02	1	requiring the use of refrigeration, e.g. of helium or hydrogen {Details and kind of the refrigeration system used; Integration with other units or processes; Controlling aspects of the process}	

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
M	F25J 1/0203	2	{using a single-component refrigerant [SCR] fluid in a closed vapor compression cycle (F25J1/0211 takes precedence)}	
M	F25J 1/0211	2	{using a multi-component refrigerant [MCR] fluid in a closed vapor compression cycle}	
M	F25J 1/0243	2	{Start-up or control of the process; Details of the apparatus used; Details of the refrigerant compression system used}	
M	F25J 3/00	0	Processes or apparatus for separating the constituents of gaseous {or liquefied gaseous} mixtures involving the use of liquefaction or solidification	
M	F25J 3/02	1	by rectification, i.e. by continuous interchange of heat and material between a vapour stream and a liquid stream (F25J3/08 takes precedence {; purification of hydrocarbons in general C07C7/00})	
M	F25J 3/0204	2	{characterised by the feed stream (for air F25J3/04)}	
M	F25J 3/0228	2	{characterised by the separated product stream}	
M	F25J 3/04	2	for air	
M	F25J 3/04006	3	{Providing pressurised feed air or process streams within or from the air fractionation unit}	
M	F25J 3/04151	3	{Purification and (pre-)cooling of the feed air; recuperative heat-exchange with product streams}	
M	F25J 3/04406	3	{using a dual pressure main column system (F25J3/0446, F25J3/04624, F25J3/04636 and F25J3/04715 take precedence)}	
M	F25J 3/04436	3	{using at least a triple pressure main column system (F25J3/0446,	

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
			F25J3/04624, F25J3/04636 and F25J3/04715 take precedence)}	
M	F25J 3/04472	3	{using the cold from cryogenic liquids produced within the air fractionation unit and stored in internal or intermediate storages}	
M	F25J 3/04521	3	{Coupling of the air fractionation unit to an air gas-consuming unit, so-called integrated processes (combined plants, e.g. engine plant combined with an industrial process F01K23/064; gas-turbine plants supplying working fluid to a chemical process F02C6/10)}	
M	F25J 3/04648	4	{argon}	
M	F25J 3/04763	3	{Start-up or control of the process; Details of the apparatus used}	
M	F25J 3/06	1	by partial condensation (F25J3/08 takes precedence; by rectification F25J3/02 {; purification of hydrocarbons in general C07C7/00})	
M	F25J 3/0605	2	{characterised by the feed stream (for air F25J3/04)}	
M	F25J 3/063	2	{characterised by the separated product stream}	
M	F25J 2200/00	0	Processes or apparatus using separation by rectification	
M	F25J 2205/00	0	Processes or apparatus using other separation and/or other processing means	
M	F25J 2210/00	0	Processes characterised by the type or other details of the feed stream	
M	F25J 2215/00	0	Processes characterised by the type or other details of the product stream	
M	F25J 2220/00	0	Processes or apparatus involving steps for the removal of impurities	

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
M	F25J 2230/00	0	Processes or apparatus involving steps for increasing the pressure of gaseous process streams	
M	F25J 2235/00	0	Processes or apparatus involving steps for increasing the pressure or for conveying of liquid process streams	
M	F25J 2240/00	0	Processes or apparatus involving steps for expanding of process streams	
M	F25J 2245/00	0	Processes or apparatus involving steps for recycling of process streams	
M	F25J 2250/00	0	Details related to the use of reboiler-condensers	
M	F25J 2260/00	0	Coupling of processes or apparatus to other units; Integrated schemes	
M	F25J 2270/00	0	Refrigeration techniques used	
M	F25J 2280/00	0	Control of the process or apparatus	
M	F25J 2290/00	0	Other details not covered by groups F25J2200/00 - F25J2280/00	

SUBCLASS F28D - HEAT-EXCHANGE APPARATUS, NOT PROVIDED FOR IN ANOTHER SUBCLASS, IN WHICH THE HEAT-EXCHANGE MEDIA DO NOT COME INTO DIRECT CONTACT (fluid heaters having heat generating means and heat transferring means F24H; furnaces F27; details of heat-exchange apparatus of general)

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
M	F28D 9/02	1	the heat-exchange media travelling at an angle to one another (F28D9/04 takes precedence)	

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SUBCLASS Y02C - CAPTURE, STORAGE, SEQUESTRATION OR DISPOSAL OF GREENHOUSE GASES [GHG]

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
M	Y02C 10/00	0	CO_2 capture or storage	
M	Y02C 20/00	0	Capture or disposal of greenhouse gases [GHG] other than CO_2	

*N = new entries where reclassification into entries is involved; C = entries with modified file scope where reclassification of documents from the entries is involved; Q = new entries which are firstly populated with documents via administrative transfers from deleted (D) entries. Afterwards, the transferred documents into the Q entry will either stay or be moved to more appropriate entries, as determined by intellectual reclassification; E= existing entries with enlarged file scope, which receive documents from C or D entries, e.g. when a limiting reference is removed from the entry title; M = entries with no change to the file scope (no reclassification); D = deleted entries; F = frozen entries will be deleted once reclassification of documents from the entries is completed; U = entries that are unchanged.

NOTES:
- **No {curly brackets} are used for titles in CPC only subclasses, e.g. C12Y, A23Y; 2000 series symbol titles of groups found at the end of schemes (orthogonal codes); or the Y section titles. The {curly brackets} are used for 2000 series symbol titles found interspersed throughout the main trunk schemes (breakdown codes).
- U groups: it is obligatory to display the required "anchor" symbol (U group), i.e. the entry immediately preceding a new group or an array of new groups to be created (in case new groups are not clearly subgroups of C-type groups).Always include the symbol, indent level and title of the U group in the table above.
- All entry types should be included in the scheme changes table above for better understanding of the overall scheme change picture. Symbol, indent level, and title are required for all types .
- "Transferred to" column must be completed for all C, D, F, and Q type entries. F groups will be deleted once reclassification is completed.
- When multiple symbols are included in the "Transferred to" column, avoid using ranges of symbols in order to be as precise as possible.
- For administrative transfer of documents, the following text should be used: "< administrative transfer to XX>", "<administrative transfer to XX and YY simultaneously>", or "<administrative transfer to XX, YY, ...and ZZ simultaneously>" when administrative transfer of the same documents is to more than one place.
- Administrative transfer to main trunk groups is assumed to be the source allocation type, unless otherwise indicated.
- Administrative transfer to 2000/Y series groups is assumed to be "additional information".
- If needed, instructions for allocation type should be indicated within the angle brackets using the abbreviations "ADD" or "INV": <administrative transfer to XX ADD> , <administrative transfer to XX INV>, or < administrative transfer to XX ADD, YY INV, ... and ZZ ADD simultaneously>.
- In certain situations, the "D" entries of 2000-series or Y-series groups may not require a destination ("Transferred to") symbol, however it is required to specify "<no transfer>" in the "Transferred to" column for such cases.
- For finalisation projects, the deleted "F" symbols should have <no transfer> in the "Transferred to" column.
- For more details about the types of scheme change, see CPC Guide.