

# WIPO



IPC/CE/33/2  
**ORIGINAL:** English  
**DATE:** August 22, 2003

## WORLD INTELLECTUAL PROPERTY ORGANIZATION GENEVA

### SPECIAL UNION FOR THE INTERNATIONAL PATENT CLASSIFICATION (IPC UNION)

#### COMMITTEE OF EXPERTS

**Thirty-Third Session  
 Geneva, October 2 to 10, 2003**

#### PROPOSED AMENDMENTS TO THE IPC

*Document prepared by the Secretariat*

1. The amendments to the IPC contained in the Technical Annexes to this document have been approved by the IPC Revision Working Group at its third to ninth sessions and are herewith submitted to the Committee of Experts for adoption. These amendments concern the following IPC subclasses:

<u>Area</u>	<u>Annex</u>	<u>Project</u>	<u>Area</u>	<u>Annex</u>	<u>Project</u>
A23C	1	413	C07C	12	413
A61F	2	386	C07K	13	413
A61G	3	386	C10G	14	413
A61H	4	371	C11B	15	413
A61K	5	412	C12H	16	413
A61K	5	413	C12N	17	413
A61M	6	413	C13D	18	413
A61Q	7	412	F23B	19	371
B01D	8	413	F23C	20	417
B01J	9	413	F23D	21	371
C02F	10	413	F23G	22	417
C07B	11	413	G01N	23	413

2. The amendments referred to in the preceding paragraph have been compiled by the International Bureau from the following Annexes of the reports of the IPC Revision Working Group (in the order of the revision projects):

Project	Class or subclass affected	Approved amendments contained in Annex .. to document IPC/WG/-													
		9/8		8/8		7/7		6/5		5/3		4/5		3/3	
		E	F	E	F	E	F	E	F	E	F	E	F	E	F
371	F23B	1E, E	1F, E	1E, E	1F	13E	13F	15, E		18					
	F23D					14									
386	A61F	2, E													
	A61G	3, E													
	A61H	4, E													
412	A61K	9E	9F												
	A61Q	10E	10F												
413	A23C							24			33				
	A61K							25			34				
	A61M							26			35				
	B01D	11, E	9, E					27	31		36				
	B01J	12	10				28				37E, E	37F	54		
	C02F							29			38				
	C07B							30			39				
	C07C							31			40				
	C07K							32			41				
	C10G							33			42				
	C11B							34			43				
	C1 H							35			44				
	C12N							36			45				
	C13D							37			46				
	G01N							38	32, E		47				
417	F23C	13	13, E		30										
	F23G	14			31										

3. In addition to the approval of the amendments referred to above, the IPC Revision Working Group considered matters to which its attention had been drawn by the Committee of Experts (see document IPC/CE/32/12, paragraphs 11 to 13) and agreed as follows:

“Project C 386 (mechanical) – Following the request of the Committee of Experts, it was agreed that in the English version of subclasses A61F, A61G and A61H, the term ‘patients’ should be added to the term ‘disabled persons.’ The Working Group noted that the French version of these subclasses did not need any modification.” [See document IPC/WG/9/8, paragraph 62.]

Project C 412 (chemical) – Following the request of the Committee of Experts, the Working Group considered and approved transfer notes for the deleted main group A61K 7/00 and its subgroups.

*4. The Committee of Experts is invited to adopt the amendments to the IPC proposed in Technical Annexes 1 to 23 to this document.*

[Technical Annexes follow]

## TECHNICAL ANNEXES

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**ANNEX 1**      **A 23 C**      **[Project-Rapporteur : 413/GB]**      **<CE33029E>**

*N Note(s) after  
9/14*

*When classifying in this group, classification is also made in group **B 01 D 15/08** insofar as subject matter of general interest relating to chromatography is concerned.*

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**ANNEX 2**      **A 61 F**      **[Project-Rapporteur : 386/US]**      **<CE33044E>**

**4/00**      **Methods or devices enabling patients or disabled persons to operate ---**

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**ANNEX 3**      **A 61 G**      **[Project-Rapporteur : 386/US]**      **<CE33045E>**

**Title**      **TRANSPORT, PERSONAL CONVEYANCES, OR ACCOMMODATION SPECIALLY ADAPTED FOR PATIENTS OR DISABLED PERSONS; OPERATING TABLES --- walking aids **A 61 H 3/00**; inclined lifts associated with stairways for transporting patients, disabled persons or wheelchairs **B 66 B 9/08**)**

**1/003**      **• with facilities for picking up patients or disabled persons, e.g. break-away --- endless belts (devices in general for lifting patients or disabled persons **7/10**)**

**3/00**      **--- provisions for transporting patients or disabled persons, or their personal conveyances, e.g. for ---**

**3/02**      **• Loading or unloading personal conveyances; Facilitating access of patients or disabled persons to, or exit from, vehicles**

**3/04**      **• Transfer of seated patients or disabled persons by swinging ---**

**5/00**      **Chairs or personal conveyances specially adapted for patients or disabled persons, e.g. wheelchairs (chairs with toilet conveniences **A 47 K 11/04**; devices enabling patients or disabled persons to operate an apparatus or device not forming part of the body **A 61 F 4/00**; running gear or propulsion features **B 60 K**; bicycles specially adapted for disabled riders **B 62 K 3/16**)**

Note(s) after  
5/00

		Chairs for patients or disabled persons having removable --- with the patient or disabled person to a vehicle and support the patient or disabled person during use ---
5/02		<ul style="list-style-type: none"><li>• propelled by the patient or disabled person</li></ul>
<b>Guide Heading after 5/14</b>		<b><u>Beds or accessories for patients or disabled persons; Treatment rooms ---</u></b>
7/00		<b>--- for nursing; Devices for lifting patients or disabled persons</b> ( <a href="#">A 61 F 5/045</a> takes precedence; stretchers with facilities for picking up patients or disabled persons <a href="#">1/003</a> )
7/10		<ul style="list-style-type: none"><li>• Devices for lifting patients or disabled persons, e.g. special ---</li></ul>
7/12		<ul style="list-style-type: none"><li>• for hoisting the patient or disabled person under the ---</li></ul>
7/14		<ul style="list-style-type: none"><li>• facilitating both lifting and lateral movement of the patient or disabled person</li></ul>

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<b>ANNEX 4</b>	<b>A 61 H</b>	<b>[Project-Rapporteur : 371/SE]</b>	<b>&lt;CE33046E&gt;</b>
<b>Title</b>		<b>--- devices enabling patients or disabled persons to operate ---</b>	
<b>3/00</b>		<b>Appliances for aiding patients or disabled persons to walk about ---</b>	
3/04		<ul style="list-style-type: none"><li>• Wheeled walking aids for patients or disabled persons</li></ul>	

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<b>ANNEX 5</b>	<b>A 61 K</b>	<b>[Project-Rapporteur : 412/EP]</b>	<b>&lt;CE33022E&gt;</b>
D 7/00		(transferred to <a href="#">8/00 - 8/99, A 61 Q 7/02, 11/00, 11/02, 99/00</a> )	
D 7/02		(transferred to <a href="#">8/00 - 8/99, A 61 Q 1/00</a> )	
D 7/021		(transferred to <a href="#">8/00 - 8/99, A 61 Q 1/02</a> )	
D 7/025		(transferred to <a href="#">8/00 - 8/99, A 61 Q 1/04</a> )	
D 7/027		(transferred to <a href="#">8/00 - 8/99, A 61 Q 1/06</a> )	
D 7/031		(transferred to <a href="#">8/00 - 8/99, A 61 Q 1/08</a> )	
D 7/032		(transferred to <a href="#">8/00 - 8/99, A 61 Q 1/10</a> )	
D 7/035		(transferred to <a href="#">8/00 - 8/99, A 61 Q 1/12</a> )	
D 7/04		(transferred to <a href="#">8/00 - 8/99, A 61 Q 3/00</a> )	
D 7/043		(transferred to <a href="#">8/00 - 8/99, A 61 Q 3/02</a> )	
D 7/047		(transferred to <a href="#">8/00 - 8/99, A 61 Q 3/04</a> )	
D 7/06		(transferred to <a href="#">8/00 - 8/99, A 61 Q 5/00 - 9/00</a> )	

D 7/07 (transferred to 8/00 - 8/99, A 61 Q 5/00 - 9/00)  
D 7/075 (transferred to 8/00 - 8/99, A 61 Q 5/12)  
D 7/08 (transferred to 8/00 - 8/99, A 61 Q 5/02)  
D 7/09 (transferred to 8/00 - 8/99, A 61 Q 5/04)  
D 7/11 (transferred to 8/00 - 8/99, A 61 Q 5/06)  
D 7/13 (transferred to 8/00 - 8/99, A 61 Q 5/10)  
D 7/135 (transferred to 8/00 - 8/99, A 61 Q 5/08)  
D 7/15 (transferred to 8/00 - 8/99, A 61 Q 9/02)  
D 7/155 (transferred to 8/00 - 8/99, A 61 Q 9/04)  
D 7/16 (transferred to 8/00 - 8/99, A 61 Q 11/00)  
D 7/18 (transferred to 8/69, 8/70, A 61 Q 11/00)  
D 7/20 (transferred to 8/00 - 8/99, A 61 Q 11/00)  
D 7/22 (transferred to 8/40 - 8/45, A 61 Q 11/00)  
D 7/24 (transferred to 8/365, A 61 Q 11/00)  
D 7/26 (transferred to 8/97, 8/98, A 61 Q 11/00)  
D 7/28 (transferred to 8/66, A 61 Q 11/00)  
D 7/30 (transferred to 8/00 - 8/99, A 61 Q 11/02)  
D 7/32 (transferred to 8/00 - 8/99, A 61 Q 15/00)  
D 7/34 (transferred to 8/00 - 8/99, A 61 Q 15/00)  
D 7/36 (transferred to 8/00 - 8/99, A 61 Q 15/00)  
D 7/38 (transferred to 8/00 - 8/99, A 61 Q 15/00)  
D 7/40 (transferred to 8/00 - 8/99, A 61 Q 17/00)  
D 7/42 (transferred to 8/00 - 8/99, A 61 Q 17/04)  
D 7/44 (transferred to 8/00 - 8/99, A 61 Q 17/04)  
D 7/46 (transferred to 8/00 - 8/99, A 61 Q 13/00)  
D 7/48 (transferred to 8/00 - 8/99, A 61 Q 19/00 - 19/08)  
D 7/50 (transferred to 8/30 - 8/99, A 61 Q 19/10)

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ANNEX 6 A 61 M [Project-Rapporteur : 413/GB] <CE33031E>

Note(s) after  
the title

N (3) *When classifying in this subclass, classification is also made in group B 01 D 15/08 insofar as subject matter of general interest relating to chromatography is concerned.*

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ANNEX 7 A 61 Q [Project-Rapporteur : 412/EP] <CE33023E>

N 99/00 *Cosmetics or similar toilet preparations for specific uses not provided for in other groups of this subclass*

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ANNEX 8 B 01 D [Project-Rapporteur : 413/GB] <CE33019E>

Note(s) after  
the title

(4) *— — — over other subclasses in class B 01.*

15/00 *— — — liquids with solid sorbents (using liquid sorbents 11/00; ion exchange processes or materials, sorbent materials in general B 01 J, e.g. sorbents for chromatography 20/281; for investigating or analysing materials G 01 N 30/00); Apparatus therefor*

C 15/04 *• — — — as adsorbents (15/36 takes precedence)*

N Note(s) after  
15/08

*In order that group 15/08 may provide a basis for a complete search with respect to chromatography in general, all subject matter of general interest is classified in this group even if it is classified primarily in the application-oriented groups, for example dairy products A 23 C 9/148, treatment of blood e.g. A 61 M 1/36, optically active organic compounds C 07 B 57/00 or peptides C 07 K 1/16.*

N 15/10 *• • characterised by constructional or operational features*

N 15/12 *• • • relating to the preparation of the feed*

N 15/14 *• • • relating to the introduction of the feed to the apparatus*

N 15/16 *• • • relating to the conditioning of the fluid carrier*

N 15/18 *• • • relating to flow patterns*

N 15/20 *• • • relating to the conditioning of the sorbent material*

N 15/22 *• • • relating to the construction of the column*

N 15/24 *• • • relating to the treatment of the fractions to be distributed*

- N 15/26 • • characterised by the separation mechanism
- N 15/30 • • • Partition chromatography
- N 15/32 • • • Bonded phase chromatography, e.g. with normal bonded phase, reversed phase or hydrophobic interaction
- N 15/34 • • • Size-selective separation, e.g. size-exclusion chromatography; Gel filtration; Permeation
- N 15/36 • • • involving ionic interaction, e.g. ion-exchange, ion-pair, ion-suppression or ion-exclusion
- N 15/38 • • • involving specific interaction not covered by one or more of groups 15/30 to 15/36, e.g. affinity, ligand exchange or chiral chromatography
- N 15/40 • • • using supercritical fluid as mobile phase or eluent
- N 15/42 • • characterised by the development mode, e.g. by displacement or by elution
- 53/02 • by adsorption, e.g. preparative gas chromatography

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**ANNEX 9**      **B 01 J**      **[Project-Rapporteur : 413/GB]**      **<CE33020E>**

<b>Guide Heading before 20/00</b>	<b><u>--- aid compositions; Sorbents for chromatography; Catalysts</u></b>
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- C 20/00 --- or filter aid compositions; Sorbents for chromatography; Processes for --- separation **B 01 D 53/02, 53/14**)
- N 20/281 • Sorbents specially adapted for preparative, analytical or investigative chromatography
- N 20/282 • • Porous sorbents (ion exchange **39/00 to 41/00**)
- N 20/283 • • • based on silica
- N 20/284 • • • based on alumina
- N 20/285 • • • Polymers
- N 20/286 • • Phases chemically bonded to a substrate, e.g. to silica or to polymers
- N 20/287 • • • Non-polar phases; Reversed phases
- N 20/288 • • • Polar phases
- N 20/289 • • • via a spacer
- N 20/29 • • Chiral phases
- N 20/291 • • Gel sorbents
- N 20/292 • • Liquid sorbents

<b>Guide Heading before 39/00</b>	--- separation by ion-exchangers <b>B 01 D</b> , e.g. separation of liquids by ion-exchange adsorbents <b>15/04</b> , chromatography involving ion-exchange <b>15/36</b> ; separation of ---
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	Note(s) before 39/00	<Delete former note (3)>
C	<b>39/00</b>	<i>--- exchange properties (ion-exchange chromatography processes B 01 D 15/36)</i>
D	<b>39/06</b>	(transferred to <a href="#">39/26</a> )
N	<b>39/26</b>	• <i>Cation exchangers for chromatographic processes</i>
C	<b>41/00</b>	<i>--- exchange properties (ion-exchange chromatography processes B 01 D 15/36)</i>
D	<b>41/06</b>	(transferred to <a href="#">41/20</a> )
N	<b>41/20</b>	• <i>Anion exchangers for chromatographic processes</i>
C	<b>43/00</b>	<i>--- ion-exchange properties (ion-exchange chromatography processes B 01 D 15/36)</i>
C	<b>45/00</b>	<i>--- ion-exchange properties (ion-exchange chromatography processes B 01 D 15/36)</i>
C	<b>47/00</b>	<i>--- Apparatus therefor (ion-exchange chromatography processes or apparatus B 01 D 15/08)</i>
C	<b>49/00</b>	<i>--- Apparatus therefor (ion-exchange chromatography processes or apparatus B 01 D 15/08)</i>

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**ANNEX 10**      **C 02 F**      **[Project-Rapporteur : 413/GB]**      **<CE33032E>**

	Note(s) after the title	
N	(2)	<i>When classifying in this subclass, classification is also made in group B 01 D 15/08 insofar as subject matter of general interest relating to chromatography is concerned.</i>
	(3)	<Former note (2)>
	(4)	<Former note (3)>

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**ANNEX 11**      **C 07 B**      **[Project-Rapporteur : 413/GB]**      **<CE33033E>**

	Note(s) after the title	
N	(5)	<i>When classifying in this subclass, classification is also made in group B 01 D 15/08 insofar as subject matter of general interest relating to chromatography is concerned.</i>

ANNEX 12 C 07 C [Project-Rapporteur : 413/GB] <CE33034E>

Note(s) after  
the title

N (7) *When classifying in this subclass, classification is also made in group B 01 D 15/08 insofar as subject matter of general interest relating to chromatography is concerned.*

(8) <Former note (7)>

ANNEX 13 C 07 K [Project-Rapporteur : 413/GB] <CE33035E>

Note(s) after  
the title

N (7) *When classifying in this subclass, classification is also made in group B 01 D 15/08 insofar as subject matter of general interest relating to chromatography is concerned.*

(8) <Former note (7)>

ANNEX 14 C 10 G [Project-Rapporteur : 413/GB] <CE33036E>

*N Note(s) after  
25/00*

When classifying in this group, classification is also made in group **B 01 D 15/08** insofar as subject matter of general interest relating to chromatography is concerned.

ANNEX 15 C 11 B [Project-Rapporteur : 413/GB] <CE33037E>

*N*      *Note(s) after*  
*3/10*

When classifying in this group, classification is also made in group **B 01 D 15/08** insofar as subject matter of general interest relating to chromatography is concerned.

ANNEX 16 C 12 H [Project-Rapporteur : 413/GB] <CE33038E>

Note(s) after  
the title

*N*

(1) In this subclass, -- --

(2) *When classifying in this subclass, classification is also made in group B 01 D 15/08 insofar as subject matter of general interest relating to chromatography is concerned.*

ANNEX 17 C 12 N [Project-Rapporteur : 413/GB] <CE33040E>

Note(s) after  
the title

*N* (2) *Biocidal, pest repellant, pest attractant or plant growth regulatory activity of compounds or preparations is further classified in subclass A 01 P.*

*N* (3) <Former note (2)>

*N* (4) *When classifying in this subclass, classification is also made in group B 01 D 15/08 insofar as subject matter of general interest relating to chromatography is concerned.*

*N* (5) <Former note (3)>

ANNEX 18 C 13 D [Project-Rapporteur : 413/GB] <CE33039E>

*N Note(s) after  
3/00*

When classifying in this group, classification is also made in group **B 01 D 15/08** insofar as subject matter of general interest relating to chromatography is concerned

ANNEX 19 F 23 B [Project-Rapporteur : 371/SE] <CE33002E>

## Title

**METHODS OR APPARATUS FOR COMBUSTION USING ONLY SOLID FUEL** (for combustion of fuels that are solid at room temperatures, but burned in melted form, e.g. candle wax, **C 11 C**, **F 23 C**, **D**; using solid fuel suspended in air **F 23 C**, **F 23 D 1/00**; using solid fuel suspended in liquids **F 23 C**, **F 23 D 11/00**; using solid fuel and fluent fuel simultanenously or alternately **F 23 C**, **F 23 D 17/00**)

Note(s) after the title	<Delete former note>	
N	(1)	<i>This subclass only <u>covers</u> combustion wherein the main body of fuel is either essentially stationary during combustion or mechanically transported, as opposed to pneumatically transported or suspended in air, during combustion.</i>
N	(2)	<i>In this subclass, the first place priority rule is applied, i.e. at each hierarchical level, classification is made in the first appropriate place.</i>
N	(3)	<i>In this subclass, methods are classified in the groups that cover the apparatus used. Methods that are not related to a particular type of apparatus are classified in group 26/00.</i>
N	(4)	<i>In this subclass, it is desirable to add the indexing codes of groups 101/00 to 103/02.</i>
D	1/00	(transferred to 10/00, 14/00 - 99/00)
D	1/02	(transferred to 14/00 - 99/00)
D	1/04	(transferred to 14/00 - 99/00)
D	1/06	(transferred to 14/00 - 99/00)
D	1/08	(transferred to 14/00 - 99/00)
D	1/10	(transferred to 14/00 - 99/00)
D	1/12	(transferred to 10/00)
D	1/14	(transferred to 10/00, 14/00 - 99/00)
D	1/16	(transferred to 14/00, 14/02, 14/06, 14/10 - 20/02)
D	1/18	(transferred to 14/00, 14/02, 14/06 - 14/10, 18/00 - 18/06)
D	1/20	(transferred to 14/00, 14/02, 14/06 - 14/10, 18/00 - 18/06)
D	1/22	(transferred to 14/08)
D	1/24	(transferred to 14/00 - 14/04)
D	1/26	(transferred to 10/00, 14/00 - 18/04, 18/08 - 20/00)
D	1/28	(transferred to 18/00 - 18/12)
D	1/30	(transferred to 14/00 - 20/02, 24/00 - 24/04)
D	1/32	(transferred to 14/00 - 14/04)
D	1/34	(transferred to 10/00, 14/00 - 18/10, 24/00 - 99/00)
D	1/36	(transferred to 18/00 - 18/12)
D	1/38	(transferred to 10/00, 14/00 - 99/00)
D	3/00	(transferred to 12/00)
D	5/00	(transferred to 10/00, 14/00 - 99/00)
D	5/02	(transferred to 14/00 - 18/12, 22/00)
D	5/04	(transferred to 10/00, 14/00 - 99/00)

<i>D</i>	<i>7/00</i>	(transferred to <i>10/00, 14/00 - 20/02, 24/00 - 99/00</i> )
<i>N</i>	<b><i>10/00</i></b>	<b><i>Combustion apparatus characterised by the combination of two or more combustion chambers</i></b>
<i>N</i>	<b><i>12/00</i></b>	<b><i>Combustion apparatus specially adapted for portability or transportability</i></b>
<i>N</i>	<b><i>14/00</i></b>	<b><i>Combustion apparatus with driven means for agitating the burning fuel; Combustion apparatus with driven means for advancing the burning fuel through the combustion chamber</i></b>
<i>N</i>	<i>14/02</i>	<ul style="list-style-type: none"><li>• <i>with movable, e.g. vibratable, fuel-supporting surfaces; with fuel-supporting surfaces that have movable parts</i></li></ul>
<i>N</i>	<i>14/04</i>	<ul style="list-style-type: none"><li>• <ul style="list-style-type: none"><li>• <i>with fuel-supporting surfaces that are rotatable around a horizontal or inclined axis and support the fuel on their inside, e.g. cylindrical grates</i></li></ul></li></ul>
<i>N</i>	<i>14/06</i>	<ul style="list-style-type: none"><li>• <ul style="list-style-type: none"><li>• <i>for advancing fuel on or along the fuel-supporting surface (<i>14/04</i> takes precedence)</i></li></ul></li></ul>
<i>N</i>	<i>14/08</i>	<ul style="list-style-type: none"><li>• <ul style="list-style-type: none"><li>• <i>with fuel-supporting surfaces that move through the combustion zone, e.g. with chain grates</i></li></ul></li></ul>
<i>N</i>	<i>14/10</i>	<ul style="list-style-type: none"><li>• <ul style="list-style-type: none"><li>• <i>with fuel-supporting surfaces having fuel advancing elements that are movable, but remain essentially in the same place, e.g. with rollers or reciprocating grate bars</i></li></ul></li></ul>
<i>N</i>	<b><i>16/00</i></b>	<b><i>Combustion apparatus with driven means for feeding fuel into the combustion chamber</i></b> ( <i>14/00</i> takes precedence)
<i>N</i>	<i>16/02</i>	<ul style="list-style-type: none"><li>• <i>the fuel being fed by scattering over the fuel-supporting surface</i></li></ul>
<i>N</i>	<i>16/04</i>	<ul style="list-style-type: none"><li>• <i>from below through an opening in the fuel-supporting surface</i></li></ul>
<i>N</i>	<i>16/06</i>	<ul style="list-style-type: none"><li>• <i>along the fuel-supporting surface</i></li></ul>
<i>N</i>	<i>16/08</i>	<ul style="list-style-type: none"><li>• <ul style="list-style-type: none"><li>• <i>into pot- or trough-shaped grates</i> (<i>16/04</i> takes precedence)</li></ul></li></ul>

N	<b>18/00</b>	<b><i>Combustion apparatus in which the fuel is fed into or through the combustion zone by gravity, e.g. from a fuel storage situated above the combustion zone</i></b>
N	<b>18/02</b>	<ul style="list-style-type: none"><li>• <i>the fuel forming a column, stack or thick layer with the combustion zone at its bottom</i></li></ul>
N	<b>18/04</b>	<ul style="list-style-type: none"><li>• <ul style="list-style-type: none"><li>• <i>the movement of combustion air and flue gases being substantially transverse to the movement of the fuel</i></li></ul></li></ul>
N	<b>18/06</b>	<ul style="list-style-type: none"><li>• <ul style="list-style-type: none"><li>• <i>the flue gases being removed downwards through one or more openings in the fuel-supporting surface</i></li></ul></li></ul>
N	<b>18/08</b>	<ul style="list-style-type: none"><li>• <ul style="list-style-type: none"><li>• <i>with fuel-deflecting bodies forming free combustion spaces inside the fuel layer (18/06 takes precedence)</i></li></ul></li></ul>
N	<b>18/10</b>	<ul style="list-style-type: none"><li>• <ul style="list-style-type: none"><li>• <i>with the combustion zone at the bottom of fuel-filled conduits ending at the surface of a fuel bed</i></li></ul></li></ul>
N	<b>18/12</b>	<ul style="list-style-type: none"><li>• <i>the fuel being fed to the combustion zone by free fall or by sliding along inclined surfaces, e.g. from a conveyer terminating above the fuel bed (16/02, 18/02 take precedence)</i></li></ul>
N	<b>20/00</b>	<b><i>Combustion apparatus in which the fuel burns essentially without moving</i></b>
N	<b>20/02</b>	<ul style="list-style-type: none"><li>• <i>with combustion air supplied through a grate</i></li></ul>
N	<b>22/00</b>	<b><i>Combustion apparatus characterised by means for returning solid combustion residues to the combustion chamber</i></b>
N	<b>24/00</b>	<b><i>Combustion apparatus characterised by means creating a distinct flow path for flue gases or for non-combusted gases given off by the fuel</i></b>
N	<b>24/02</b>	<ul style="list-style-type: none"><li>• <i>by means for returning flue gases to the combustion chamber or to the combustion zone</i></li></ul>
N	<b>24/04</b>	<ul style="list-style-type: none"><li>• <i>by means for guiding the flow of flue gases, e.g. baffles (24/02 takes precedence)</i></li></ul>
N	<b>26/00</b>	<b><i>Combustion methods not related to a particular type of apparatus</i></b>
N	<b>99/00</b>	<b><i>Subject matter not provided for in other groups of this subclass</i></b>
N	<b><u>Heading before 101/00</u></b>	<b><u><i>Indexing scheme related to adaptation of combustion apparatus to boilers</i></u></b>
N	<b>101/00</b>	<b><i>Adaptation of combustion apparatus to boilers in which the combustion chamber is situated inside the boiler vessel, e.g. surrounded by cooled surfaces</i></b>
N	<b>103/00</b>	<b><i>Adaptation of combustion apparatus for placement in or against an opening of a boiler, e.g. for replacing an oil burner</i></b>
N	<b>103/02</b>	<ul style="list-style-type: none"><li>• <i>for producing an essentially horizontal flame</i></li></ul>

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ANNEX	20	F 23 C [Project-Rapporteur : 417/SE]	<CE33021E>	
	<b>Title</b>	<b>METHODS OR APPARATUS FOR COMBUSTION USING FLUENT FUEL</b> (burners <a href="#">F 23 D</a> ; constructional ---)		
N	<i>Note(s) after the title</i>		<i>In this subclass, methods are classified in the groups that cover the apparatus used.</i>	
C	<b>1/00</b>	<b>Combustion apparatus specially adapted for combustion of two or -- - simultaneously or alternately, at least -- - being fluent</b> (combustion apparatus characterised by the combination of two or more combustion chambers <a href="#">6/00</a> ; pilot flame igniters <a href="#">F 23 Q 9/00</a> )		
	1/02	• lump and liquid fuel		
	1/04	• lump and gaseous fuel		
	1/06	• lump and pulverulent fuel		
	1/08	• liquid and gaseous fuel		
	1/10	• liquid and pulverulent fuel		
	1/12	• gaseous and pulverulent fuel		
C	<b>3/00</b>	--- combustion chamber ( <a href="#">15/00</a> takes precedence)		
C	<b>5/00</b>	<b>Combustion apparatus characterised by the arrangement or mounting of burners</b>		
C	<b>6/00</b>	--- combustion chambers		
C	<b>7/00</b>	<b>Combustion apparatus characterised by arrangements for air supply</b> (inlets for fluidisation air <a href="#">10/20</a> )		
C	<b>9/00</b>	<b>Combustion apparatus characterised by arrangements for returning combustion products or flue gases to the combustion chamber</b> (fluidised bed combustion apparatus with means for recirculation of particles entrained from the bed <a href="#">10/02</a> ; fluidised bed combustion apparatus with devices for removal and partial reintroduction of material from the bed <a href="#">10/26</a> )		
	<b>10/00</b>	<b>Apparatus in which combustion takes place in a fluidised bed of fuel or other particles</b>		
N	10/01	• in a fluidised bed of catalytic particles		
C	<b>11/00</b>	--- <a href="#">1/00</a> to <a href="#">10/00</a> , <a href="#">13/00</a> or <a href="#">15/00</a>		
D	11/04	(transferred to <a href="#">15/00</a> )		
N	<b>13/00</b>	<b>Apparatus in which combustion takes place in the presence of catalytic material</b> (in a fluidised bed of catalytic particles <a href="#">10/01</a> ; radiant gas burners using catalysis for flameless combustion <a href="#">F 23 D 14/18</a> )		
N	13/02	• characterised by arrangements for starting the operation, e.g. for heating the catalytic material to operating temperature		
N	13/04	• characterised by the arrangement of two or more catalytic elements in series connection		

N 13/06 • *in which non-catalytic combustion takes place in addition to catalytic combustion, e.g. downstream of a catalytic element*

N 13/08 • *characterised by the catalytic material*

N 15/00 ***Apparatus in which combustion takes place in pulses influenced by acoustic resonance in a gas mass***

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ANNEX 21 F 23 D [Project-Rapporteur : 371/SE] <CE33042E>

17/00 **Burners for combustion simultaneously or alternately of gaseous –**  
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ANNEX 22 F 23 G [Project-Rapporteur : 417/SE] <CE33004E>

C 7/00 *Incinerators or other apparatus specially adapted for consuming specific waste or low grade fuels, e.g. chemicals (1/00) takes precedence; incinerator closets A 47 K 11/02; --*

N 7/07 • • *in which combustion takes place in the presence of catalytic material*

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ANNEX 23 G 01 N [Project-Rapporteur : 413/GB] <CE33028E>

D 30/48 (*transferred to B 01 J 20/281 - 20/292*)

N 30/89 • *Inverse chromatography, i.e. with the analyte in stationary phase*

[End of Technical Annexes and of document]