

EUROPEAN PATENT OFFICE  
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1615

DATE: MAY 1, 2024

PROJECT MP11967

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

<u>Action</u>	<u>Subclass</u>	<u>Group(s)</u>
<b>SCHEME:</b>		
Titles Changed:	F15D	1/0015, 1/002, 1/06, 1/12
Warnings Deleted:	F15D	SUBCLASS
Notes Modified:	F15D	SUBCLASS
<b>DEFINITIONS:</b>		
Definitions New:	F15D	1/0005, 1/002, 1/04, 1/06
Definitions Modified:	F15D	1/001, 1/0015, 1/08, 1/12

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)

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1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)

**SUBCLASS F15D - FLUID DYNAMICS, i.e. METHODS OR MEANS FOR INFLUENCING THE FLOW OF GASES OR LIQUIDS**

<u>Type*</u>	<u>Symbol</u>	<u>Indent Level Number of dots (e.g. 0, 1, 2)</u>	<u>Title</u> <u>“CPC only” text should normally be enclosed in {curly brackets}**</u>	<u>Transferred to#</u>
M	F15D 1/0015	1	{Whirl chambers, e.g. vortex valves}	
M	F15D 1/002	1	{by influencing the boundary layer}	
M	F15D 1/06	2	by influencing the boundary layer	
M	F15D 1/12	2	by influencing the boundary layer	

\*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; T = 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.

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B. New, Modified or Deleted Warning(s)

**SUBCLASS F15D - FLUID DYNAMICS, i.e. METHODS OR MEANS FOR INFLUENCING THE FLOW OF GASES OR LIQUIDS**

<u>Type*</u>	<u>Location</u>	<u>Old Warning</u>	<u>New/Modified Warning</u>
D	F15D	In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.	Delete the Warning.

\*N = new warning, M = modified warning, D = deleted warning

NOTE: The "Location" column only requires the symbol PRIOR to the location of the warning. No further directions such as "before" or "after" are required.

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C. New, Modified or Deleted Note(s)

**SUBCLASS F15D - FLUID DYNAMICS, i.e. METHODS OR MEANS FOR INFLUENCING THE FLOW OF GASES OR LIQUIDS**

<u>Type*</u>	<u>Location</u>	<u>Old Note</u>	<u>New/Modified Note</u>
M	F15D	This subclass comprises boundary-layer control and other arrangements and methods, not provided for in other classes, for influencing the flow of fluids relative to constraining surfaces and after leaving these surfaces, e.g. producing or removing turbulence, deflecting jets, guiding flow through bends in conduits, affecting distribution of fluid in a conduit, reducing fluid friction.	This subclass <u>covers</u> boundary-layer control and other arrangements and methods, not provided for in other classes, for influencing the flow of fluids relative to constraining surfaces and after leaving these surfaces, e.g. producing or removing turbulence, deflecting jets, guiding flow through bends in conduits, affecting distribution of fluid in a conduit, reducing fluid friction.

\*N = new note, M = modified note, D = deleted note

NOTE: The "Location" column only requires the symbol PRIOR to the location of the note. No further directions such as "before" or "after" are required.

## 2. A. DEFINITIONS (new)

### F15D 1/0005

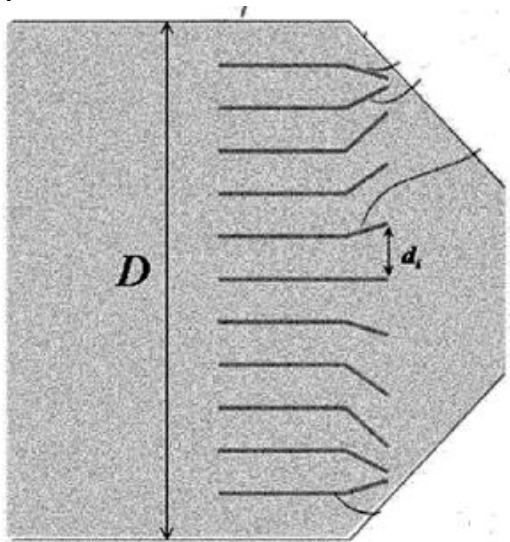
#### Definition statement

*This place covers:*

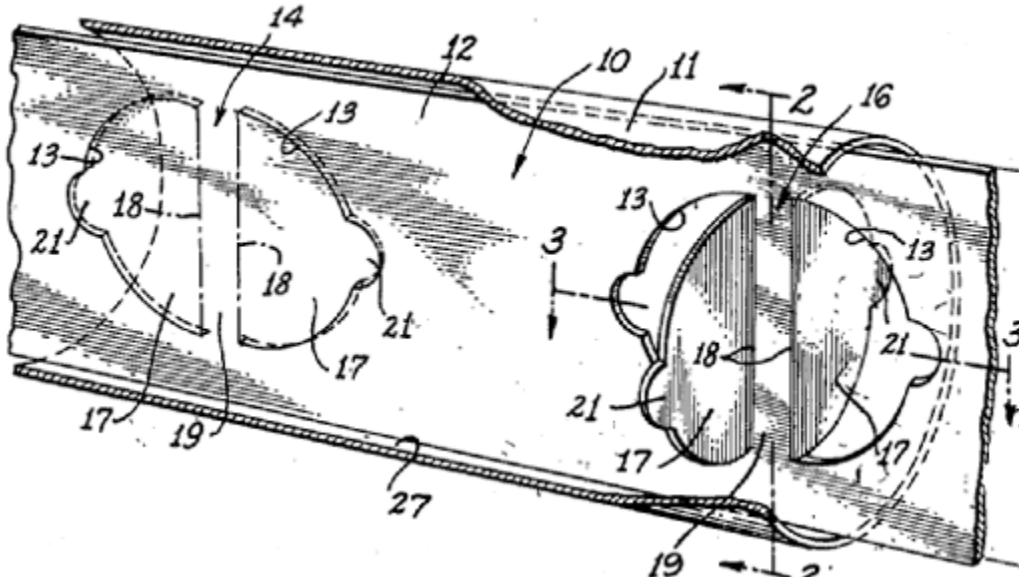
Flow directing or obstructing plates, vanes or panels used to direct or modify a flow of fluid.

Illustrative examples of subject matter classified in this place:

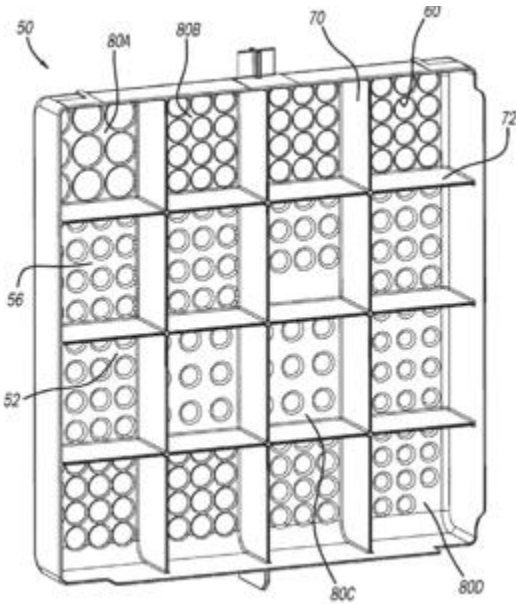
1.



2.



3.



## F15D 1/002

### Special rules of classification

Influencing boundary layer in pipes is classified in F15D 1/06, whereas details of the boundary influencing means may be further classified in F15D 1/002 when appropriate.

Influencing the boundary layer around bodies of solid material is classified in F15D 1/12, whereas details of the boundary influencing means may be further classified in F15D 1/002 when appropriate.

## F15D 1/04

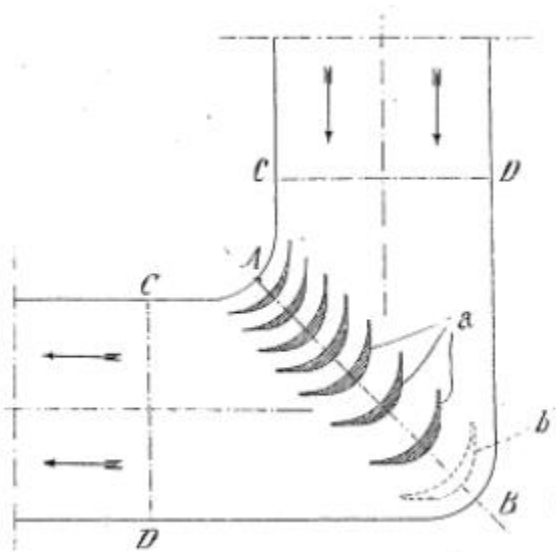
### Definition statement

*This place covers:*

Guiding elements arranged within pipe elbows or duct bends; the construction of a pipe conduit element for elbows (e.g. tee, wye), which typically reduces the flow losses.

Illustrative examples of subject matter classified in this place:

1.

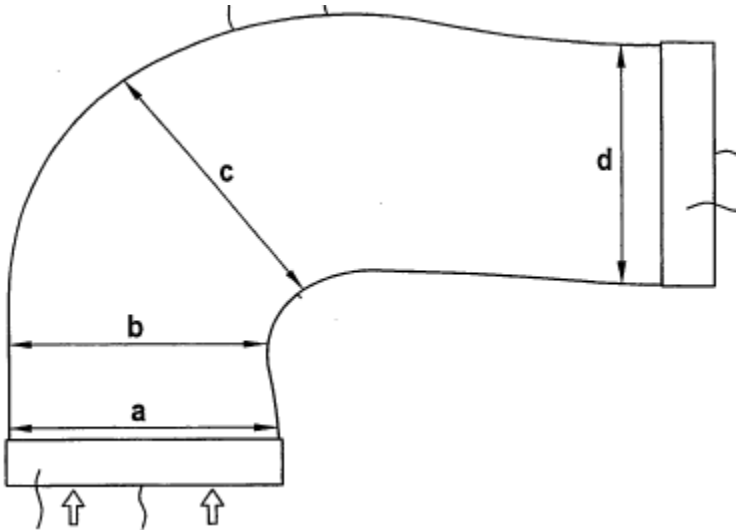


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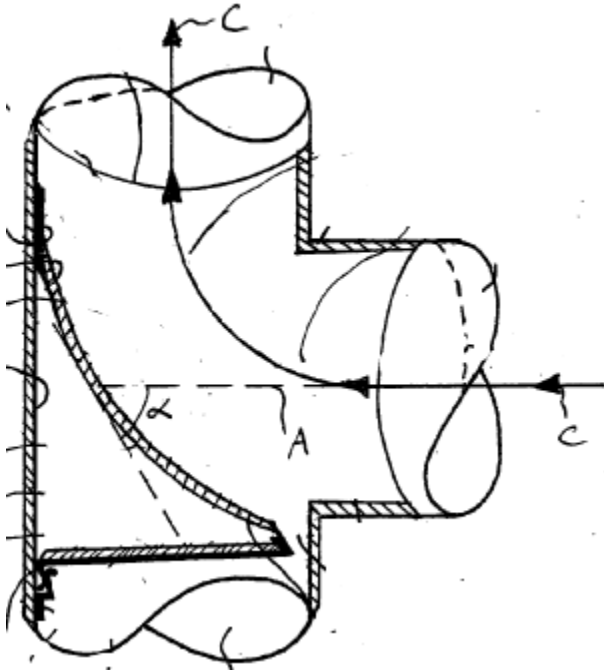
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2.



3.





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**F15D 1/06**

**Special rules of classification**

Complete classification will include F15D1/002 for further details of the boundary layer influencing means and F15D1/0085 when appropriate for the method of making the surface for influencing the boundary layer.

## 2. A. DEFINITIONS (modified)

### F15D 1/001

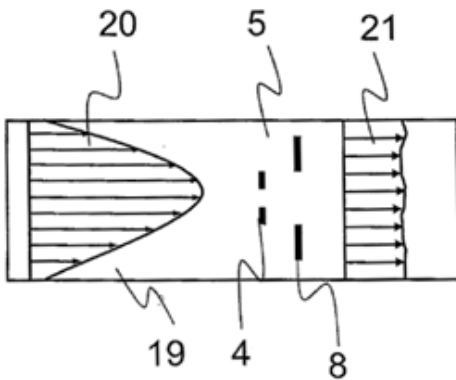
Replace: The existing Definition statement text with the following updated text, so that the updated Definition statement appears as follows.

#### Definition statement

*This place covers:*

Means for equalising the velocity distribution across the cross section of a fluid conduit.

Illustrative example of subject matter classified in this place:



### F15D 1/0015

Replace: The existing Definition statement text with the following updated text and images.

#### Definition statement

*This place covers:*

A fluid flow influencing device situated between an inlet and an outlet, the device causing the fluid to form a swirl or vortex, without the need for moving parts to create the swirl or vortex.

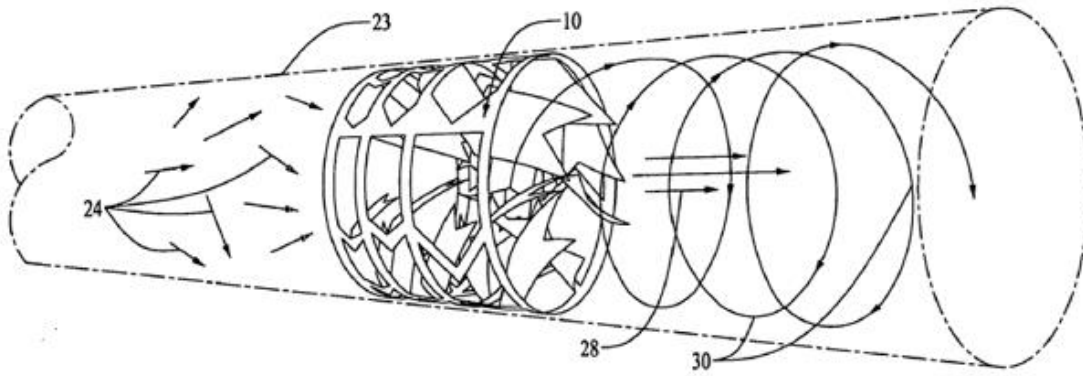
Illustrative examples of subject matter classified in this place:

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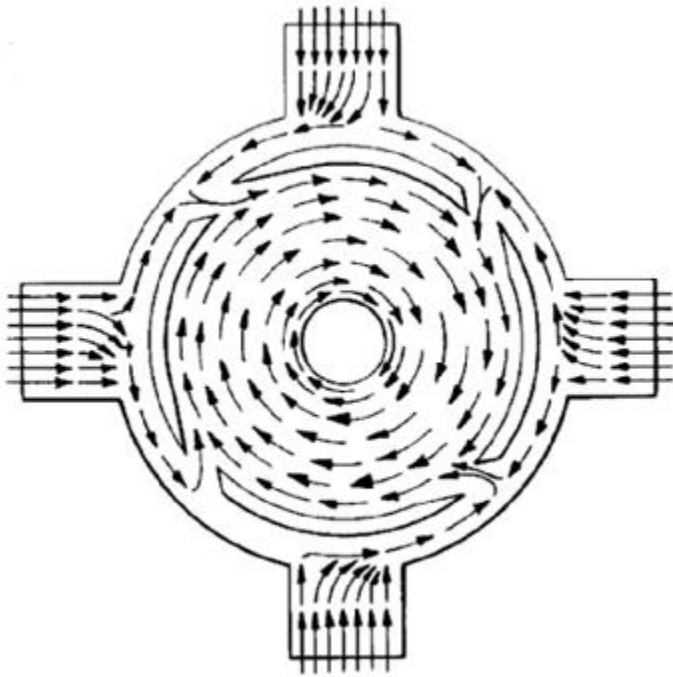
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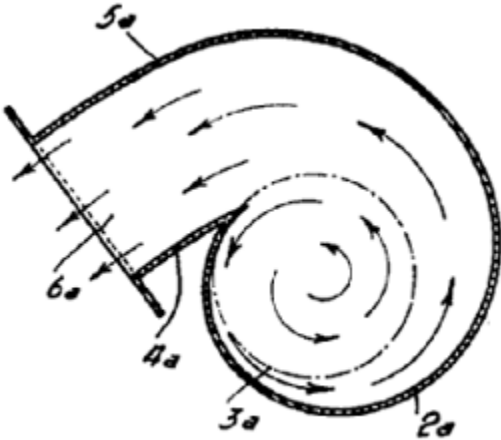
1.



2.



3.



Insert: The following new Synonyms and Keywords section.

### **Synonyms and Keywords**

*In patent documents, the following words/expressions are often used as synonyms:*

- whirl
- swirl
- vortex, vortices, vorticity
- eddy, eddies

### **F15D 1/08**

### **References**

Replace: The existing symbol in the Informative references table with the updated symbol text below.

### **Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Nozzles or outlets with means for mechanically breaking-up or deflecting the jet	B05B, e.g. B05B 1/26
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**F15D 1/12**

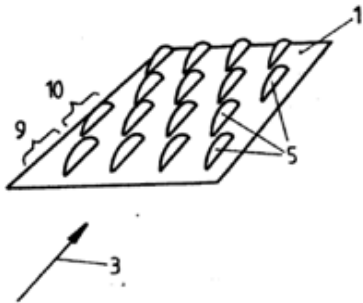
Replace: The existing Definition statement text with the following updated text and numerals preceding the images.

**Definition statement**

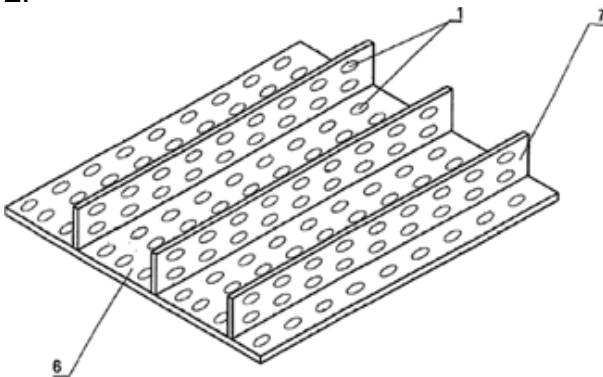
*This place covers:*

Illustrative examples of subject matter classified in this place.

1.



2.



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## References

Delete: The entire Informative references section.

Insert: The following new Application-oriented references section.

## Application-oriented references

*Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:*

Golf balls having dimples	<a href="#">A63B 37/0004</a>
Influencing air-flow over aircraft surfaces by affecting boundary-layer flow using, e.g. riblets	<a href="#">B64C 21/10</a>

Delete: The entire Synonyms and Keywords section.

Insert: The following new Special rules of classification section.

## Special rules of classification

Complete classification will include F15D1/002 for further details of the boundary layer influencing means and F15D1/0085 when appropriate for the method of making the surface for influencing the boundary layer.