E06C

LADDERS (E04F 11/00 takes precedence; step-stools A47C 12/00; adaptation of ladders to use on ships B63B, to use on aircraft B64; scaffolding E04G)

Definition statement

This place covers:
Ladders in general, ladders mounted on undercarriages or vehicles, component parts or accessories of ladders, and ladders in relation with buildings

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Step-tools</th>
<th>A47C 12/00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptation of ladders to use on ships</td>
<td>B63B</td>
</tr>
<tr>
<td>Adaptation of ladders to use on aircrafts</td>
<td>B64</td>
</tr>
<tr>
<td>Staircases</td>
<td>E04F 11/00</td>
</tr>
<tr>
<td>Scaffolding</td>
<td>E04G</td>
</tr>
<tr>
<td>Ladders for special structures, e.g. ladders for swimming-pools</td>
<td>E04H</td>
</tr>
</tbody>
</table>

E06C 1/00

Ladders in general (mounted on undercarriages or vehicles E06C 5/00; permanently attached to fixed structures E06C 9/00)

Definition statement

This place covers:
Ladders in general with rigid longitudinal members, e.g. ladders for resting against objects or ladders capable of standing by themselves, and ladders in general with non-rigid longitudinal members, e.g. rope or chain ladders.

References

Limiting references

This place does not cover:

| Ladders mounted on undercarriages or vehicles | E06C 5/00 |
| Ladders permanently attached to fixed structures | E06C 9/00 |
| Hunting stands                               | A01M 31/00 |
| Ladders on boats, ships                      | B63B 27/14 |
| Staircases                                   | E04F 11/00 |
| Loft ladders                                 | E04F 11/04 |
| Swimming pool ladders                         | E04H 4/144 |
E06C 1/005

{Ladders in use as furniture or ladders in relation to furniture, e.g. in cupboards (step-stools, chairs or benches requiring conversion between the step and seat functions A47C 12/02)}

Definition statement

This place covers:
Ladders either fixedly or foldably attached to furniture and eventually storable into furniture

References

Limiting references

This place does not cover:

| Step-stools, chairs or benches requiring conversion between the step and seat functions | A47C 12/02 |

E06C 1/04

Ladders for resting against objects, e.g. walls poles, trees (supports for ladder heads E06C 7/48)

Definition statement

This place covers:
Ladders specially adapted for resting against objects, e.g. walls poles, trees

References

Informative references

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

| Ladder heads, as accessories for ladders | E06C 7/48 |

E06C 1/08

multi-part {(E06C 1/32 takes precedence)}

Definition statement

This place covers:
Ladders comprising a series of longitudinal sections fitted substantially end to end and/or ladders being extensible in their length by way of sliding means only (e.g. telescopic ladders)

References

Limiting references

This place does not cover:

| Ladders with a strut which is formed as a ladder and can be secured in line with the ladder (i.e. ladders having a strut formed as a ladder, hinged with the ladder and securable in line with the ladder); Longitunally folded ladders that can be extended in line by unfolding | E06C 1/32 |
E06C 1/12

extensible, e.g. telescopic

References

Informative references

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

| Extending means for ladders | E06C 7/02 |
| Securing devices or hooks for parts of extensible ladders | E06C 7/06 |

E06C 1/16

with \{hinged\} struts which rest on the ground (with struts rigid with the ladder E06C 1/24; having platforms E06C 1/39)

References

Limiting references

This place does not cover:

| Non-hinged free-standing ladders, e.g. ladders with struts rigid with the ladder | E06C 1/24 |
| Ladders having platforms | E06C 1/39 |

E06C 1/18

with supporting struts formed as ladders {((E06C 1/32 takes precedence))}

References

Limiting references

This place does not cover:

| Ladders capable of standing by themselves and with telescopic supporting struts formed as ladders | E06C 1/22 |
| Ladders with a strut which is formed as a ladder and can be secured in line with the ladder | E06C 1/32 |

E06C 1/20

with supporting struts formed as poles {((stabilising struts E06C 7/423))}

Definition statement

This place covers:

Ladders capable of standing by themselves and with supporting struts formed as poles as part of the ladder.
References

Informative references

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

| Ladders having stabilising struts | E06C 7/423 |

E06C 1/22

with extensible, e.g. telescopic, ladder parts or struts

Definition statement

This place covers:
Ladders capable of standing by themselves and with telescopic supporting struts formed as ladders.

E06C 1/24

{Non-hinged} free-standing ladders

Special rules of classification

Ladders in E06C 1/24 - E06C 1/28 having extensible parts should also be classified in E06C 1/30

E06C 1/32

Ladders with a strut which is formed as a ladder and can be secured in line with the ladder

Definition statement

This place covers:
Ladders with a strut which is formed as a ladder and can be secured in line with the ladder, e.g. ladders having a strut formed as a ladder and hinged with the ladder, that can be secured in line with the ladder. This group also covers longitudinally folded ladders that can be extended in line by unfolding.

References

Informative references

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

| Ladders in general capable of standing by themselves, with hinged struts | E06C 1/16 |
| Hinges | E05D |
E06C 1/34
Ladders attached to structures, such as windows, cornices, poles, or the like ([E06C 9/12 takes precedence]; ladders permanently fastened to buildings E06C 9/00, {e.g. climbing irons E06C 9/04})

Definition statement
This place covers:
Ladders specially adapted by using intrinsic means (i.e. the means being part of the ladder) for being attached to or to properly rest against structures, such as windows, cornices, poles or the like

References
Limiting references
This place does not cover:

| Ladders permanently fastened to buildings | E06C 9/00 |
| Climbing irons | E06C 9/04 |
| Ladders permanently fastened to buildings, and laterally displaceable | E06C 9/12 |

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

| Ladder heads, as accessories for ladders | E06C 7/48 |
| Built-in climbing irons for poles | A63B 27/00 |

E06C 1/36
Ladders suspendable by hooks or the like {(ladderhooks E06C 7/505)}

Definition statement
This place covers:
Ladders suspendable by hooks, e.g. ladders having a hook or grab at their top

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

| Ladderhooks, as accessories for a ladder, e.g. hooks to be fixed on a wall for suspending a ladder vertically or horizontally against a wall | E06C 7/505 |
E06C 1/38
Special constructions of ladders, e.g. ladders with more or less than two longitudinal members, ladders with movable rungs or other treads, longitudinally-foldable ladders

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

<table>
<thead>
<tr>
<th>Reference</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladders on vehicles formed of links which reinforce themselves against each other</td>
<td>E06C 5/30</td>
</tr>
<tr>
<td>Special constructions of longitudinal members, or rungs or other treads</td>
<td>E06C 7/08</td>
</tr>
</tbody>
</table>

E06C 1/383
Foldable ladders in which the longitudinal members are brought together on folding (\textit{E06C 9/085 takes precedence})

Definition statement
This place covers:
Foldable ladders in which the longitudinal members are brought together on folding, e.g. ladders in which the rungs are hinged on the longitudinal members, or the hinges are foldable to allow the longitudinal members to be brought together

References
Limiting references
This place does not cover:

<table>
<thead>
<tr>
<th>Reference</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladders in general capable of standing by themselves, with hinged struts</td>
<td>E06C 1/16</td>
</tr>
<tr>
<td>Ladders with a strut which is formed as a ladder and can be secured in line with the ladder, e.g. ladders having a strut formed as a ladder and hinged with the ladder, that can be secured in line with the ladder</td>
<td>E06C 1/32</td>
</tr>
<tr>
<td>Ladders permanently attached to fixed structures in which the longitudinal members are brought together on folding</td>
<td>E06C 9/085</td>
</tr>
</tbody>
</table>

E06C 1/387
having tip-up steps

Definition statement
This place covers:
Ladders having tip-up steps, e.g. ladders having rungs collapsible in-line with the ladder on folding
E06C 1/39

Ladders having platforms; Ladders changeable into platforms (platforms for use on ladders E06C 7/16)

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifts on ladders, as accessories for ladders</td>
<td>E06C 7/12</td>
</tr>
<tr>
<td>Platforms for use on ladders, as accessories</td>
<td>E06C 7/16</td>
</tr>
</tbody>
</table>

Informative references

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

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunting stands</td>
<td>A01M 31/00</td>
</tr>
<tr>
<td>Scaffolds</td>
<td>E04G</td>
</tr>
</tbody>
</table>

E06C 1/397

characterised by having wheels, rollers, or runners

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladders being mounted on undercarriages or vehicles</td>
<td>E06C 5/00</td>
</tr>
<tr>
<td>Ladders permanently fastened to buildings, and laterally displaceable, e.g. library ladders</td>
<td>E06C 9/12</td>
</tr>
</tbody>
</table>

E06C 1/52

with non-rigid longitudinal members

Definition statement

This place covers:

Ladders in general with non-rigid longitudinal members, e.g. lazy-tongs type, rope or chain ladders

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladders with non-rigid longitudinally members permanently attached to fixed structures and movably mounted, e.g. rope or chain ladders</td>
<td>E06C 9/14</td>
</tr>
</tbody>
</table>
E06C 1/54

of the lazy-tongs type

References

Informative references

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

| Ladders of the lazy-tongs type mounted on vehicles | E06C 5/28 |

E06C 1/56

Rope or chain ladders

References

Informative references

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

| Rope or chain ladders permanently attached to buildings | E06C 9/14 |

E06C 1/58

with both rigid and non-rigid longitudinal members

Definition statement

This place covers:

Ladders in general having both rigid and non-rigid longitudinal members, e.g. ladders comprising sections in which the longitudinal members are rigid and sections in which the longitudinal members are not rigid

E06C 5/00

Ladders characterised by being mounted on undercarriages or vehicles

Securing ladders on vehicles (ladders having wheels, rollers, or runners

E06C 1/397 {; ladders on boats B63B 27/14})

Definition statement

This place covers:

Ladders mounted on undercarriages or ground vehicles and having rigid longitudinal members, or ladders mounted on undercarriages or ground vehicles and having non-rigid longitudinal members, and accessories specially adapted therefor.

References

Limiting references

This place does not cover:

| Ladders having wheels, rollers, or runners | E06C 1/397 |
| Arrangements of steps or ladders facilitating access to or on a vehicle; retractable | B60R 3/00; B60R 3/02 |
Steps for railway vehicles  B61D 23/00
Ladders on boats or ships  B63B 27/14

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

| Fittings on vehicle exterior to carry loads | B60R 9/00 |
| Cranes | B66C |
| Lifting devices | B66F |

E06C 5/02
with rigid longitudinal members

References

Limiting references
This place does not cover:

| Running boards for vehicles; for vehicle tops | B60R 3/002; B60R 3/005 |

E06C 5/04
capable of being elevated or extended {Fastening means during transport, e.g. mechanical, hydraulic}

References

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

| Retractable steps or ladders facilitating access to vehicles | B60R 3/02 |
| Fastening means on vehicle exterior | B60R 9/00 |
| Carriers for ladders on vehicle roofs | B60R 9/0423; B60R 9/0485 |
| Lifting devices for movable platforms, e.g. on vehicles | B66F 11/04 |

E06C 5/06
by piston and cylinder, or equivalent means, operated by a pressure medium

Definition statement
This place covers:

Ladders having elevating assist, by piston and cylinder, or equivalent means, operated by a pressure medium
References

Informative references

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

| Lifting devices for movable platforms suspended from booms, e.g. on vehicles | B66F 11/044 |
| Pistons; Cylinders; Pressure vessels | E16J |

E06C 5/20

using hand-power (hand-operated extending means carried by the ladder E06C 7/04)

References

Informative references

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

| Hand-operated extending means carried by the ladder | E06C 7/04 |

E06C 5/22

by, or with the assistance of, springs (E06C 5/06, E06C 5/16 take precedence)

References

Limiting references

This place does not cover:

| Ladders mounted on vehicles, with rigid longitudinal members, and capable of being elevated or extended by piston and cylinder or equivalent means | E06C 5/06 |
| Ladders mounted on vehicles, with rigid longitudinal members, and capable of being elevated or extended using mechanical transmission | E06C 5/16 |

E06C 5/24

Dismounting ladders from vehicles (or supporting means)

References

Informative references

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

| Carriers for ladders on vehicles facilitating loading or unloading | B60R 9/0423 |
E06C 5/26
with non-rigid longitudinal members

Definition statement
This place covers:
Ladders mounted on undercarriages or vehicles and having non-rigid longitudinal members

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

<table>
<thead>
<tr>
<th>Example</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladders in general with non-rigid longitudinal members; Ladders in</td>
<td>E06C 1/52;</td>
</tr>
<tr>
<td>general with both rigid and non-rigid longitudinal members</td>
<td>E06C 1/58</td>
</tr>
<tr>
<td>Ladders permanently attached to fixed structures, with non-rigid</td>
<td>E06C 9/14</td>
</tr>
<tr>
<td>longitudinal members</td>
<td></td>
</tr>
</tbody>
</table>

E06C 5/28
of the lazy-tongs type

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

<table>
<thead>
<tr>
<th>Example</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladder in general of the lazy-tongs type</td>
<td>E06C 1/54</td>
</tr>
</tbody>
</table>

E06C 5/32
Accessories {, e.g. brakes on ladders}

Definition statement
This place covers:
Safety devices and accessories for use with or on ladders mounted on undercarriages or vehicles

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

<table>
<thead>
<tr>
<th>Example</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessories on ladders in general</td>
<td>E06C 7/00</td>
</tr>
</tbody>
</table>
### E06C 5/34
**Indicating devices**

**References**

**Informative references**

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

<table>
<thead>
<tr>
<th>Indicating devices for ladders in general</th>
<th>E06C 7/003</th>
</tr>
</thead>
</table>

### E06C 5/36
**Safety devices against slipping or falling of ladders; Safety devices against overloading ladders**

**References**

**Informative references**

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

<table>
<thead>
<tr>
<th>Devices for preventing persons from falling from ladders in general</th>
<th>E06C 7/18</th>
</tr>
</thead>
</table>

### E06C 5/38
**Devices for blocking the springs of the vehicle; Devices for supporting the undercarriage directly from the ground**

**References**

**Informative references**

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

<table>
<thead>
<tr>
<th>Ground-engaging vehicle fittings for supporting, lifting, or manoeuvring the vehicle</th>
<th>B60S 9/00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic supports for cranes</td>
<td>B66C 23/80</td>
</tr>
</tbody>
</table>

### E06C 5/44
**Other accessories on ladders, e.g. acoustical signalling devices, dismountable switchboards**

**References**

**Informative references**

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

<table>
<thead>
<tr>
<th>Indicating devices for ladders in general, e.g. user warnings or inclinators</th>
<th>E06C 7/003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devices for preventing access on ladders in general</td>
<td>E06C 7/006</td>
</tr>
</tbody>
</table>
**E06C 7/00**

Component parts, supporting parts, or accessories

**Definition statement**

*This place covers:*

Component parts, supporting parts, or accessories for ladders in general, e.g. lifts or hoisting devices on ladders, holders for pails or other equipment on ladders, accessorial platforms on ladders, ladder heads and ladder feet.

**E06C 7/003**

{Indicating devices, e.g. user warnings or inclinators}

**References**

*Informative references*

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

| Indicating devices for ladders mounted on undercarriages or vehicles; Acoustical signalling devices for ladders mounted on undercarriages or vehicles | E06C 5/34; E06C 5/44 |

**E06C 7/02**

Extending means (for ladders mounted on undercarriages or vehicles E06C 5/00)

**References**

*Limiting references*

This place does not cover:

| Extending means for ladders mounted on undercarriages or vehicles | E06C 5/00 |

*Informative references*

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

| Extensible, telescopic ladders in general | E06C 1/12 |

**E06C 7/04**

Hand-operated extending means carried by the ladder

**References**

*Informative references*

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

| Hand-operated extending means for ladders mounted on vehicles | E06C 5/20 |
E06C 7/06
Securing devices or hooks for parts of extensible ladders

References

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

- Extensible ladders in general

E06C 7/08
Special construction of longitudinal members, or rungs or other treads

Definition statement

This place covers:
Constructive details of longitudinal members, rungs or other threads, e.g. rungs styles connections

References

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

- Special constructions of ladders
- Reinforcements for ladders

E06C 7/12
Lifts or other hoisting devices on ladders

References

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

- Ladders having platforms
- Platforms for use on ladders, as ladder accessories
- Mobile or transportable lifts
- Lifting devices in general

E06C 7/14
Holders for pails or other equipment on or for ladders

References

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

- Platforms for use on ladders, as ladder accessories
Holders for paint cans  

B44D 3/14

E06C 7/16
Platforms on, or for use on, ladders, e.g. liftable or lowerable platforms (aspects relating to the lifting B66F)

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

| Lifts or other hoisting devices on ladders | E06C 12 |
| Ladders having platforms | E06C 139 |
| Mobile or transportable lifts | B66B 9/16 |
| Lifting devices in general | B66F |

E06C 7/18
Devices for preventing persons from falling (life-saving belts A62B 1/16 {; safety devices for window-cleaners A47L 3/00})

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

| Safety devices against falling of ladder supported on a vehicle | E06C 5/36 |
| Safety devices for window cleaners | A47L 3/00 |
| Life-saving belts | A62B 1/16 |

E06C 7/186
(Rail or rope for guiding a safety attachment, e.g. a fall arrest system)

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

| Devices for lowering persons from buildings | A62B 1/06 |
| Fall arresting devices | A62B 35/04 |
E06C 7/188

{Accessories for temporary stabilising a ladder, e.g. temporary attaching devices (ladder feet or struts E06C 7/42, ladder heads E06C 7/48)}

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Item</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladder feet or struts</td>
<td>E06C 7/42</td>
</tr>
<tr>
<td>Ladder heads</td>
<td>E06C 7/48</td>
</tr>
</tbody>
</table>

E06C 7/42

Ladder feet; Supports therefor (for scaffold elements E04G 5/02)

References

Informative references

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladder feet for scaffoldings</td>
<td>E04G 5/02</td>
</tr>
</tbody>
</table>

E06C 7/423

{Ladder stabilising struts}

References

Informative references

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ladder having struts formed as poles</td>
<td>E06C 1/20</td>
</tr>
</tbody>
</table>

E06C 7/44

Means for mounting ladders on uneven ground

Definition statement

This place covers:

Means for mounting ladders on uneven ground, i.e. means for mounting ladders on a staircase

E06C 7/46

Non-skid equipment

Definition statement

This place covers:

Non-skid equipment for ladder feet, e.g. anchor in the ground
**E06C 7/48**

Ladder heads; Supports for heads of ladders for resting against objects {(ladders attachable to structures such as poles E06C 1/34)}

**References**

*Informative references*

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

| Ladders attached specially adapted to be attached to structures like windows, poles, cornices | E06C 1/34 |

**E06C 7/50**

Joints or other connecting parts

**Definition statement**

This place covers:

Joints or other connecting parts for fixing ladders to each other or to construction parts, e.g. ladderhooks to be fixed on a wall to suspend a ladder vertically or horizontally against a wall. Hinges are not considered here to be connections.

**References**

*Informative references*

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

| Ladders having hinges | E06C 1/32, E06C 1/16 |

**E06C 9/00**

Ladders characterised by being permanently attached to fixed structures, e.g. fire escapes (movable stairways E04F 11/04{; means for facilitating access to swimming pools E04H 4/144})

**Definition statement**

This place covers:

Ladders permanently attached to fixed structures, either rigidly mounted, e.g. in the form of climbing irons, or movably mounted, e.g. having rigid longitudinal members and being laterally displaceable, or having non-rigid longitudinal members like a rope or chain escape ladder.

**References**

*Limiting references*

This place does not cover:

| Staircases | E04F 11/00 |
| Means for facilitating access to swimming pools | E04H 4/144 |
Informative references
Attention is drawn to the following places, which may be of interest for search:

| Movable stairways | E04F 11/04 |

E06C 9/04
in the form of climbing irons or the like { (built-in climbing irons for poles A63B 27/00; built-in climbing devices as construction element E04F 11/00) }

References
Limiting references
This place does not cover:

| Built-in climbing irons for poles | A63B 27/00 |
| Built-in climbing devices as construction element, e.g. staircases | E04F 11/00 |

E06C 9/085
{ladders unfolded in the direction of the longitudinal members}

Definition statement
This place covers:
Ladders permanently attached to fixed structures in which the longitudinal members can be brought together, e.g. ladders in which the rungs are hinged on the longitudinal members

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

| Foldable general ladders in which the longitudinal members are brought together on folding | E06C 1/383 |

E06C 9/10
forming part of a building, such as a balcony grid, window grid, or other window part { (with non-rigid longitudinal members E06C 9/14) }

References
Limiting references
This place does not cover:

| Ladders forming part of a building with non-rigid longitudinal members | E06C 9/14 |
E06C 9/12

laterally displaceable

Definition statement

This place covers:
Ladders movably mounted on a fixed structure and laterally displaceable, e.g. library ladders

E06C 9/14

with non-rigid longitudinal members, e.g. rope or chain ladders, ladders of the lazy-tongs type

References

Informative references

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

| Ladders in general with non rigid longitudinal members | E06C 1/52 |