

**C14 SKINS; HIDES; PELTS; LEATHER**

**C14B MECHANICAL TREATMENT OR PROCESSING OF SKINS, HIDES, OR LEATHER IN GENERAL; PELT-SHEARING MACHINES; INTESTINE-SPLITTING MACHINES** (making leather substitutes B29, D06N; making articles from leather B68F; mechanical cleaning of hides or the like D06G; artificial leather D06N)

**Subclass Index****LEATHER**

Manufacture .....	1/00, 7/00
Treatments	
milling; cutting .....	3/00; 5/00
finishing .....	11/00, 13/00
making belts .....	9/00
Apparatus, tools .....	17/00, 19/00

**FURS**

Treatments .....	15/00
Apparatus, tools.....	17/00, 19/00

**INTESTINES**

Splitting, cutting .....	21/00
--------------------------	-------

SUBJECT MATTER NOT PROVIDED FOR IN OTHER GROUPS OF THIS SUBCLASS .....	99/00
---	-------

**1/00 Manufacture of leather; Machines or devices therefor**

- 1/02 . Fleshing, unhairing, samming, stretching-out, setting-out, shaving, splitting, or skiving skins, hides, or leather
- 1/04 . . using slicking, scraping, or smoothing-out cylinders or blades fixed on supports, e.g. cylinders, in a plane substantially at right angles to the working surface
- 1/06 . . . in machines in which the working piece is maintained in contact with the working tools solely by means of rolls
- 1/08 . . . in machines with flexible bands as bed supporting or counter-pressure elements
- 1/10 . . . in machines with drums with cylindrical, conical, or similar surfaces for supporting the whole working piece
- 1/12 . . . in machines with plane supporting bed-plates
- 1/14 . . using tools cutting the skin in a plane substantially parallel to its surface
- 1/16 . . . using fixed or reciprocating or oscillating knives
- 1/18 . . . using band knives
- 1/20 . . . using circular dished or coned knives
- 1/22 . . . using cylindrical knives
- 1/24 . . Cutting or shearing hairs without cutting the skin (shearing furs or plucking hairs for fur manufacturing purposes C14B 15/02)
- 1/26 . Leather tensioning or stretching frames; Stretching-machines; Setting-out boards; Pasting boards (pasting processes C14B 1/60; fastening devices C14B 17/08)
- 1/28 . Machines for treating leather combined with devices for measuring and printing
- 1/30 . Pressing or rolling leather
- 1/32 . . by linear movement of the pressing elements
- 1/34 . . by rotating movement of the pressing or rolling elements
- 1/36 . . . Bridge leather-rolling machines
- 1/38 . Hammering leather
- 1/40 . Softening or making skins or leather supple, e.g. by staking, boarding, or crippling machines, by dry mills
- 1/42 . . by means of a rotatable drum with radial blades
- 1/44 . Mechanical treatment of leather surfaces
- 1/46 . . Fluffing, buffing or sanding
- 1/48 . . Roughening (by sanding C14B 1/46)
- 1/50 . . Glazing
- 1/52 . . Brushing or plush-wheeling

- 1/54 . . Ironing (pressing or rolling C14B 1/30)

- 1/56 . . Ornamenting, producing designs, embossing (pressing or rolling in general C14B 1/30; producing designs on furs C14B 15/12)

- 1/58 . Drying

- 1/60 . . Pasting processes (pasting boards C14B 1/26; chemical part C14C 7/00)

- 1/62 . Winding or stacking hides or leather

**3/00 Milling leather**

**5/00 Clicking, perforating, or cutting leather** (for shoe parts, e.g. soles, A43D; apparatus not specially adapted for leather B26D)

- 5/02 . Stamps or dies for leather articles

- 5/04 . for making leather belts or strips

- 5/06 . . Machines for cutting strips spirally from discs of leather

**7/00 Special leathers or their manufacture**

- 7/02 . Composite leathers (with one or more laminae of plastics material B32B)

- 7/04 . . by cementing or pressing together leather pieces, strips, or layers; Reinforcing or stiffening leather by means of reinforcing layers

- 7/06 . Leather webs built up of interengaged strips or pieces, e.g. by braiding

**9/00 Making driving belts or other leather belts or strips**

**11/00 Finishing the edges of leather pieces, e.g. by folding, by burning** (milling C14B 3/00)

**13/00 Shredding hides or leather** (shredding in general B02C)

**15/00 Mechanical treatment of furs**

- 15/02 . Shearing; Removing dead or coarse hairs or bristles by shearing or plucking

- 15/04 . Fur dressing

- 15/06 . . Fur-stretching devices

- 15/08 . Application of reinforcing or stiffening layers to fur skins

- 15/10 . Cutting furs; Making fur plates or strips

- 15/12 . Finishing, e.g. pointing furs; Producing designs or patterns

<b>17/00</b>	<b>Details of apparatus or machines for manufacturing or treating skins, hides, leather, or furs</b>	<b>17/12</b>	• Safety devices specially adapted for leather-working machines
<b>17/02</b>	• Blading cylinders or other working cylinders, e.g. slicking or scraping cylinders	<b>17/14</b>	• Auxiliary devices for leather-working machines, e.g. grinding devices for blading cylinders or dust-removal devices combined with the working machines
<b>17/04</b>	• Work-supports or other counter-pressing elements; Bed rolls or counter-pressing rolls		
<b>17/06</b>	• Work feeding or clamping devices	<b>19/00</b>	<b>Hand tools specially adapted for the treatment of hides, skins, or leather in the manufacture of leather or furs</b> (equipment or tools for saddlery B68C)
<b>17/08</b>	• Fastening devices, e.g. clips for leather-stretching	<b>21/00</b>	<b>Splitting intestines; Cutting intestines longitudinally</b> (cleaning or cutting intestines during processing of meat A22C 17/00)
<b>17/10</b>	• Arrangements for driving parts of leather-working machines	<b>99/00</b>	<b>Subject matter not provided for in other groups of this subclass [8]</b>

**C14C CHEMICAL TREATMENT OF HIDES, SKINS OR LEATHER, E.G. TANNING, IMPREGNATING, FINISHING; APPARATUS THEREFOR; COMPOSITIONS FOR TANNING** (dyeing or bleaching of leather or furs D06)

**Note**

Processes using enzymes or micro-organisms in order to:  
 (i) liberate, separate or purify a pre-existing compound or composition, or to  
 (ii) treat textiles or clean solid surfaces of materials  
 are further classified in subclass C12S. [5]

**Subclass Index**

PRETREATMENT .....	1/00	FINISHING; SPECIAL LEATHERS .....	11/00; 13/00
TANNING; PASTING; IMPREGNATING .....	3/00; 7/00; 9/00	APPARATUS.....	15/00
DEGREASING .....	5/00	SUBJECT MATTER NOT PROVIDED FOR IN OTHER GROUPS OF THIS SUBCLASS .....	99/00

<b>1/00</b>	<b>Chemical treatment prior to tanning</b>	<b>3/28</b>	• Multi-step processes
<b>1/02</b>	• Curing raw hides	<b>3/30</b>	• using physical means combined with chemical means
<b>1/04</b>	• Soaking	<b>3/32</b>	• Recovering tanning agents from leather
<b>1/06</b>	• Facilitating unhairing, e.g. by painting, by liming	<b>5/00</b>	<b>Degreasing leather</b>
<b>1/08</b>	• Deliming; Bating; Pickling; Degreasing	<b>7/00</b>	<b>Pasting processes (chemical part)</b>
<b>3/00</b>	<b>Tanning; Compositions for tanning</b>	<b>9/00</b>	<b>Impregnating leather for preserving, waterproofing, making resistant to heat or similar purposes</b>
<b>3/02</b>	• Chemical tanning	<b>9/02</b>	• using fatty or oily materials, e.g. fat liquoring
<b>3/04</b>	• Mineral tanning	<b>9/04</b>	• Fixing tanning agents in the leather
<b>3/06</b>	• using chromium compounds	<b>11/00</b>	<b>Surface finishing of leather</b>
<b>3/08</b>	• by organic agents	<b>13/00</b>	<b>Manufacture of special kinds of leather, e.g. vellum</b> (chamois tanning C14C 3/14)
<b>3/10</b>	• Vegetable tanning	<b>13/02</b>	• Manufacture of technical leather
<b>3/12</b>	• using purified or modified vegetable tanning agents	<b>15/00</b>	<b>Apparatus for chemical treatment or washing of hides, skins, or leather</b>
<b>3/14</b>	• Fat tanning; Oil tanning	<b>99/00</b>	<b>Subject matter not provided for in other groups of this subclass [8]</b>
<b>3/16</b>	• using aliphatic aldehydes		
<b>3/18</b>	• using polycondensation products or precursors thereof		
<b>3/20</b>	• sulfonated		
<b>3/22</b>	• using polymerisation products		
<b>3/24</b>	• using lignin derivatives, e.g. sulfate liquor		
<b>3/26</b>	• using other organic substances, containing halogen		