

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
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SUBJECT MATTER NOT PROVIDED FOR IN OTHER GROUPS OF THIS SUBCLASS	99/00
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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 aspects 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 9/02)

- 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

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

C14C CHEMICAL TREATMENT OF SKINS, HIDES 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

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