INTERNATIONAL PATENT CLASSIFICATION 1974 (SECOND EDITION)

SECTIONS D-H

INTERNATIONAL PATENT CLASSIFICATION 1974 (SECOND EDITION)

SECTIONS **D-H**



Section D—TEXTILES AND PAPER

CONTENTS OF SECTION

(references and notes omitted)

				i i	٠.
Sub-Sec	tion: TEXTILES AND FLEXIBLE MATERIALS NOT OTHERWISE	page			page
	PROVIDED FOR				
D 01	NATURAL OR ARTIFICIAL THREADS OR FIBRES; SPINNING	3	D 05	SEWING; EMBROIDERING; TUFTING	25
D 01 B	Mechanical treatment of natural	ŭ	D 05 I	B Sewing	25
	fibrous or filamentary material to obtain fibres or filaments, e.g. for		(C Embroidering; Tufting	28
c	spinning Chemical treatment of natural	3	D 06	TREATMENT OF TEXTILES, etc.; LAUNDERING; FLEXIBLE MATERI-	
Ĭ	filamentary or fibrous material to obtain filaments or fibres for spin-	4		ALS NOT OTHERWISE PROVIDED FOR	30
	ning; Carbonising rags to recover animal fibres	4	D 06 I	B Treating textile materials by liquids, gases or vapours	30
D	Mechanical methods and apparatus in the manufacture of artificial filaments, threads, fibres, bristles	1		C Finishing, dressing, tentering or stretching textile fabrics	31
	or ribbons	4	1	F Laundering	32
F	Chemical features in the manufacture of artificial filaments, threads, fibres, bristles or ribbons	5		G Mechanical or pressure cleaning of carpets, rugs, sacks, hides or other skin or textile articles or fabrics;	
G	Preliminary treatment of fibres, e.g. for spinning	- 6		Turning inside-out flexible tubular or other hollow articles	36
Н	Spinning or twisting	8 -		H Marking, inspecting, seaming or severing textile materials	37
D 02	YARNS; MECHANICAL FINISHING OF YARNS OR ROPES; WARPING OR	•		J. Pleating, kilting, or goffering textile fabrics or wearing apparel	37
	BEAMING	12		L Bleaching, e.g. optical bleaching, dry- cleaning, or washing fibres, threads,	
D 02 G	Crimping or curling fibres, filaments, yarns or threads; Yarns or threads	12		yarns, fabrics, feathers or made-up fibrous goods; Bleaching leather or	
H	Warping, beaming or leasing	12	. 1	furs	37
J	Finishing or dressing of filaments, yarns, threads, cords, ropes or the like	13	, ,	M Treatment, not provided for else- where in class D 06, of fibres, threads, yarns, fabrics, feathers or	
D 03	WEAVING	14		fibrous goods made from such materials	38
D 03 C	Shedding mechanisms; Pattern cards and chains; Punching of cards; Design- ing patterns	14	. 1	N Wall, floor, and like covering materials, e.g. linoleum, oilcloth, artificial leather, roofing felt, consis-	50
	Woven fabrics; Methods of weaving; Looms	15		ting of a fibrous web coated with a layer of macromolecular material;	
J	Auxiliary weaving apparatus; Weavers' tools: Shuttles	18		Flexible sheet material not other- wise provided for	40
D 04	BRAIDING; LACE-MAKING;	10	1	P Dyeing or printing textiles; Dyeing leather, furs, or solid macromolecular	
•	KNITTING; TRIMMINGS; NON- WOVEN FABRICS	19		substances in any form Decorating textiles	40 41
D 04 B	Knitting	19		becoming textiles	41
C	Braiding and manufacture of lace, including bobbin-net or carbonised		D 07	ROPES; CABLES OTHER THAN ELECTRIC	42
D	lace; Braiding machines; Braid; Lace Trimmings; Ribbons, tapes or bands,	22	D 07 1	B Ropes or cables in general	42
G	not otherwise provided for Making nets by knotting of filamen-	22	Sub-Se	ection: PAPER	
	tary material; Making knotted carpets or tapestries; Knotting not otherwise provided for	23	D 21	PAPER-MAKING; PRODUCTION OF CELLULOSE	43
Н	Making textile fabrics, e.g. from fibres or filamentary material;		D 21	B Fibrous raw materials and their mechanical treatment	43
	Fabrics made by such processes or apparatus, e.g. felts, non-woven fabrics; Cotton-wool; Wadding	23	(C Production of cellulose by removing non-cellulosic substances from cellulose-containing materials;	43
					-

			page				page
		Regeneration of pulping liquors; Apparatus therefor		D 21	G	Calenders; Accessories for paper- making machines	45
D 21	D	Treatment of the digested materials before passing to the paper-making machine; Processes for adding substances to the formed web on the			Н	Cardboard; Paper; Their manufacture not covered by sub-class D 21 F	45
	F	paper-making machines; Methods of producing paper on them	44 44		J	Fibreboard; Manufacture of articles from cellulosic fibrous suspensions or from papier-maché	46

TEXTILES AND FLEXIBLE MATERIALS NOT OTHERWISE PROVIDED FOR

D 01 NATURAL OR ARTIFICIAL THREADS OR FIBRES; SPINNING

(metal threads B 21; fibres or filaments of softened glass, minerals, or slag C-83 B 37/00; yarns D 02)

Explanatory note

In this class, the following words are used with the meanings indicated:

- (a) "fibre" means a relatively-short, elongated member of natural or artifical material.
- (b) "filament" means an endless or quasi-endless, elongated member of natural or artificial material.
- (c) "yarn" means a unitary assembly of fibres, usually produced by spinning.
- (d) "thread" means an assembly of yarns or filaments, usually produced by twisting.

D 01 B MECHANICAL TREATMENT OF NATURAL FIBROUS OR FILAMENTARY MATERIAL TO OBTAIN FIBRES OR FILAMENTS, e.g. FOR SPINNING (crude extraction of asbestos fibres from ores B 03 B; apparatus for retting D 01 C)

Note

Sub-cla	b-class Index TREATMENT OF ANIMAL FIBRES				
TREAT	ME	NT OF PLANT MATERIAL	De-burring, washing, scouring 3/00		3/00
Sepa mate		ion of fibres from plant l 1/00			7/00
Hacl	klin	g or heckling machines 5/00	OTHER	TREATMENTS	9/00
1/00	m	echanical separation of fibres from plant aterial, e.g. seeds, leaves, stalks	3/00	Mechanical removal of imp fibres (carbonising rags to	
.1/02	•	Separating vegetable fibres from seeds, e.g. cotton	3/02	D 01 C 5/00) . De-burring machines or	apparatus (de-burring
1/04		. Ginning	-,	arrangements forming	
1/06		Roller gins, e.g. Macarthy type		associated with carding	or drafting machines.
1/08		. Saw gins		e.g. burr-crushing rolle	
1/10		Separating vegetable fibres from stalks or	3/04	. Machines or apparatus	
-, 10	•	leaves	0, 01	ing loose wool fibres	or manning or boom
1/12	_	. Rippling	3/06	with circular movem	ent of either wool or
1/14		. Breaking or scutching, e.g. of flax;	0, 00	liquid	01 01 010101 11 001 01
-,	•	Decorticating	3/08		vement of either wool
1/16	_	with devices dependent on a bending	-,	or liquid	
-,	•	action to break or loosen fibre-bearing	3/10	Details of machines	or apparatus
•		materials (crushing rollers 1/22)	-,		or uppuration
1/18		with stamping devices	5/00	Western best to the state of th	
1/20	·	with scraping devices	9/00	Hackling or heckling mach	ines (hand heckling
1/22	•	with crushing or breaking rollers or	5/02	tools D 01 G 33/00)	
-,	•	plates	.,		- L-13:
1/24	_	with toothed or other pointed devices	5/04	Apparatus for feedin	
1/26		with beaters rotating about an axis	5/06	materials to or in m	
-/	•	parallel with the fibre bundle	3/00	Construction, mounti	
1/28		with beaters rotating about an axis	5/08	tures of heckling dev Arrangements for re	
		perpendicular to the fibre bundle	3/06	of tow or waste	moving or disposing
1/30		Details of machines	5/10	Touch pins or other	andina davissa
1/32		Feeding arrangements	$\frac{5}{10}$	Framework; Casings	
1/34		Devices holding fibres or fibre-	$\frac{5}{14}$	Driving arrangement	
		bearing materials during treatment	5/14 5/16 -	Arrangements for co	
1/36		Conveying devices, e.g. moving	3/10 ~	dust or the like	mining or removing
		bands or ropes		dust of the like	
1/38		Delivery or discharge arrangements	- 4		
1/40		Arrangements for disposing of non-	7/00	Obtaining silk fibres or file	aments
•		fibrous materials	7/02	. Cleaning or classifying	silk cocoons
1/42		employing liquids	7/04	. Reeling silk	
1/44		Framework; Casings; Coverings;	7/06	. Obtaining silk from coc	
		Grids		thereof not suitable for	r oling (de-gumming
1/46	٠.	Driving arrangements		silk D 01 C 3/02)	-
1/48		. Drying retted fibres		. -	
1/50		Obtaining fibres from other specified vege-	9/00	Other mechanical treatmen	nt of natural fibrous or
.,	-	table matter, e.g. peat, Spanish moss		filamentary material to ob	

D 01 C CHEMICAL TREATMENT OF NATURAL FILAMENTARY OR FIBROUS MATERIAL TO OBTAIN FILAMENTS OR FIBRES FOR SPINNING; CARBONISING RAGS TO RECOVER ANIMAL FIBRES

Note

Attention is drawn to the note following the class title (D 01).

1/00 1/02 1/04	Treatment of vegetable material by chemical methods to obtain bast fibres Bacteriological retting	3/02	De-gumming silk
3/00	Treatment of animal material, e.g. chemical scouring of wool (recovery of lanolin or wool way C 11 B 11/00)	5/0 0	Carbonising rags to recover animal fibres (chemical removal of vegetable impurities from threads or fabrics of animal fibres D 06 M)

D 01 D MECHANICAL METHODS AND APPARATUS IN THE MANUFACTURE OF ARTIFICIAL FILAMENTS, THREADS, FIBRES, BRISTLES OR RIBBONS

Note

Sub-class Index			orting newly-spun products	9/00		
	IANICAL TREATMENT OF			ng after-treatment	•	
MENT	r-forming material	1/00	Other	r operations	11/00	
PROD	OUCTION OF ARTIFICIAL FI		COMPL	ETE MACHINES; DETAILS	13/00; 3/00, 7/00; 9/00, 11/04	
Me	thods	5/00			0/00,11/04	
me	innerets; formation of fila- ints; collecting the newly-spu oducts -	3/00; 5/00; 7/00				
1/00	(producing films or tuber		5/24	with a hollow structure (p plastic material B 29 D)		
4 (0.0	B 29 D)	المناب	5/26	. discontinuously for produ		
1/02 1/04			5/28	 while mixing different spi melts during the spinning 		
1/06		spinning head (construc-		merts during die spilling	operation	
1,00	tions of pumps F 04)	spinning none (construe	7/00	Collecting the newly-spun pr	oducts (winding,	
1/08			•	coiling, or depositing filamer		
1/10	. Filtering or de-aerati or melt	ng the spinning solution		general B 65 H 54/00; collect products with the imparting		
3/00		•	9/00	Supporting newly-spun artifithreads, thread bundles, or the		
5/00			9/02	after-treatment on bobbins		
5/02 5/04			9/02		and thursd weakers	
5/06			9/06	. as cakes or similar core	ess urread packages	
5/08			9/08	. while in continuous move	ment (forwarding	
5/10			-,	filamentary material B 6		
5/12		ods (finishing by	9/10	. as staple fibres		
5/14	with flowing liquid		11/00	Other features of manufactur	re	
5/16		ke mechanical devices, forwarding filamentary	11/02	. Opening bundles to space ments from one another	the threads or fila-	
	material B 65 H 51		11/04	. Fixed guides (guides for i	ilamentary material	
5/18				in general B 65 H 57/00)		
5/20			11/06	. Coating with spinning solu	itions or melts	
5/22			19/00	Complete machines for mad		
	special structure to s crimped or curled eff	imulate wool (producing	13/00	Complete machines for prod threads	nems semicisi	
	threads after formation		13/02	. Elements of machines in	combination	

CHEMICAL FEATURES IN THE MANUFACTURE OF ARTIFICIAL FILAMENTS, THREADS, FIBRES, BRISTLES OR RIBBONS D 01 F

Note

Sub-cla	ss Index	,	Fro	m syntl	hetic resins	6/00
GENERAL PROCESSES 1/00		Fro	m other	r materials	9/00	
FILAM:	ENTS AND MANUFACTURE OF		Mul	ticomp	onent filaments	8/00
	n cellulose or derivatives; proteins	2/00; 4/00			MENT, RECOVERS MATERIAL	Y 11/00,13/00
1/00	General methods for the m	anufacture of artificial	6/12		. from polymers	of fluorinated hydro-
1/02	. Addition of substances to or to the melt (addition viscose 2/08 to 2/20)		6/14		from polymers of	unsaturated alcohols, e.g. or of their acetals or
1/04	Pigments	•	6/16			unsaturated carboxylic
1/06	Dyes	6:1				ted organic esters, e.g.
1/08	Agents forming hollo				polyacrylic esters	
1/10	Other agents for mod	difying properties	6/18		polyacrylonitrile,	unsaturated nitriles, e.g. polyvinylidene cyanide
2/00	Monocomponent artificial in of cellulose or cellulose de		6/20			cyclic compounds with bon double bond in the
0./00	facture thereof		6/22		. from polystyre	ne
2/02 2/04	or salts	,	6/24	• •	from polymers of	aliphatic compounds with bon-to-carbon double
2/06	. , from cuprammonium . from viscose (preparati	les of alkali callulase			bond	•
2/00	C 08 B)	ion of sikali cellulose	6/26		from other polyme	ers
0 /00	- ··· -,		6/28	. fr	om copolyaddition	products of unsaturated
2/08		pinning solution or the			mpounds	
	bath (preparing and o	dissolving cellulose			. *	
	xanthate C 08 B)		Note	For	the purposes of gro	ups 6/30 to 6/96, the
2/10	Addition to the sp			perc	entage for determir	ning the major constituent
	spinning bath of s	ubstances which exert		is ex	pressed in mole pe	rcent.
	their effect equall	ly well in either	0 /00		_	
2/12	Addition of delust	ring agents to the	6/30			s as the major constituent
•	spinning solution		6/32			nated hydrocarbons as
2/14	Addition of pig	ments			the major constitu	ent
2/16		o the spinning solution	6/34		comprising unsatu	rated alcohols, acetals
2/18		inning solution of sub-			or ketals as the m	
2/10	stances to influen		6/36		comprising unsatu	rated carboxylic acids or
2/20		re of hollow threads	5		unsaturated organ	ic esters as the major
2/22					constituent	•
	by the dry spinning p		6/38		comprising unsatu	rated nitriles as the
2/24	. from cellulose derivativ	ves	-,		major constituent	
2/26	from nitrocellulose		6/40			, i.e. containing 35 to 85%
2/28	from organic cellulo e.g. cellulose acetate	•	6/42		acrylonitrile	compounds containing
2/30	by the dry spinnin	g process	o, 1 -	• •		bon double bond in the
3/00	(transferred to 2/00, 11/00), 13/00)	6/44	. fr		lition polymers as major
٠, ٠٠	(014,10101104 00 4, 00, 11, 00	,, 10, 00,	0, 11			polymers or low mole-
		_				
4/00	Monocomponent artificial f		6/46	cu	lar weight compour	IMD .
	of proteins; Manufacture th	ereof			of polyolefins	
4/02	. from fibroin		6/48 6/50	• •		ogenated hydrocarbons
4/04	. from casein					lyacetals or polyketals
4/06	. from globulins, e.g. grou	ındnut protein	6/52			saturated carboxylic acids
		-	0/54		or unsaturated est	
5/00	(transferred to 4/00, 11/00	13/00)	6/54	• •	of polymers of una	
U/ UU	(cranotetien to 1/00, 11/00	, 10/00)	6/56			clic compounds with one
						double bond in the side
6/00	Monocomponent artificial f				chain	
	of synthetic polymers; Man		6/5¢	. fr	om homopolyconder	sation products
6/02	 from homopolyaddition per ted compounds 	products of unsatura-	6/60		from polyamides (or polypeptides 6/	from polyamino acids
6/04	from polyolefins		6762		from polyesters	~ ~,
6/06	from polypropyler	ne.	6/64		from polycarbo	nates
6/08		logenated hydrocarbons	6/66	• •		114100
6/10		loride or polyvinyli-		• •	from polyethers	(da an malama 223
0/10	dene chloride	tor me or bothauti-	6/68	•		ids or polypeptides
	dene curourde		6/70	• •	from polyurethane	8

(D 01 F,	G) ENGLISH (Second edition) [D 6]		
6/72	from polyureas	9/00	Artificial filaments of other substances; Manu-
6/74	from polycondensates of cyclic compounds,	- (facture thereof
	e.g. polyimides, polybenzimidazoles	9/02	. of reaction products of rubber with acids or
6/76	from other polycondensation products	- /	acid anhydrides, e.g. sulphur dioxide
6/78	. from copolycondensation products	9/04	. of alginates
6/80	from copolyamides	9/06	(transferred to 11/00)
6/82	from polyester amides or polyether amides	9/08	. of inorganic material (from softened glass,
6/84	from copolyesters		minerals or slags C 03 B 37/00; incandescent
6/86	from polyetheresters		bodies F 21 H, H 01 K 1/02, 3/02)
6/88	. from mixtures of polycondensation products	9/10	by decomposition of organic substances
	as major constituent with other polymers or	9/12	Carbon filaments
	low molecular weight compounds	9/14	by decomposition of organic filaments
ช/90	of polyamides	9/16	Cellulose or cellulose derivatives
6/92	of polyesters	9/18	Proteins, e.g. wool
6/94	of other polycondensation products	9/20	Polyaddition or polycondensation
6/96	. from other synthetic polymers		products
		9/22	Polyacrylonitrile
7/00	(transferred to 6/00, 8/00, 11/00, 13/00)		
8/00	Conjugated, i.e. bi- or multicomponent, artificial filaments or the like; Manufacture thereof	11/00	Chemical after-treatment of artificial filaments or the like during manufacture (finishing D 06 M)
8/02	. from cellulose, cellulose derivatives or pro-	11/02	. of cellulose, cellulose derivatives or proteins
	teins	11/04	. of synthetic polymers
8/04	. from synthetic polymers	11/06	of polyaddition products of unsaturated
8/06	with at least one polyolefin as constituent		compounds
8/08	with at least one polyacrylonitrile as	11/08	of polycondensation products
	constituent	11/10	. of carbon
8/10	with at least one other polyaddition product of unsaturated compounds as constituent		
8/12	with at least one polyamide as constituent	13/00	Recovery of starting material, waste material
8/14	with at least one polyester as constituent	•	or solvents during the manufacture of artificial
8/16	with at least one other polycondensation		filaments or the like
-,	product as constituent	13/02	. of cellulose, cellulose derivatives or proteins
8/18	. from other substances	13/04	of synthetic polymers
0, 20	a seneral manadorinast	-4/41	. or almanora harlinara

D 01 G PRELIMINARY TREATMENT OF FIBRES, e.g. FOR SPINNING (winding or unwinding, conducting or guiding laps, webs, slivers or rovings in general, sliver or roving cans, depositing in sliver or roving cans B 65 H; preparation of fibres for paper-making D 21)

Note

Sub-class Inc OPERATION MACHINES	S BEFORE CARDING;		mac	ling or conveying fibres for nines; lap-forming; lap- ing; lubricating fibres	23/00; 25/00; 27/00; 29/00
	ibre bales; separating ng of fibres; opening or fibres	7/00; 5/00; 9/00	Card	ling and burr-crushing, ping	15/00, 19/00
Severing	of continuous filaments;	1/00; 3/00	SILK-DRESSING; TREATMENT OF OAKUM		17/00, 35/00
Toughtoning of Hotes 170			MISCE	LLANEOUS	
Recovery of fibres by breaking- up fibre-containing articles		11/00		bination of machines or esses for continuous pro- ing	21/00
	fibres, or of fibres	13/00	War	ning or safety devices	31/00
with non-fibrous materials CARDING OR SUBSEQUENT OPERATIONS; MACHINES THERE-		13/00	fibre	tools for treatment of s	33/00
FOR	o, anomina indica		MENTS		37/00
1/02 . 1/04 . 1/06 .	ering continuous filaments pling to form staple fibres not d form . by cutting Converting tows to slivers direct spinning (drafting ar ing arrangements D 01 H)	elivered in strand	1/08 1/10 3/00 5/00	by stretching or abrae by cutting Roughening of fibres Separating, e.g. sorting, fibr of differing lengths in silk-17/00; in combing machines	es (separating fibres dressing machines

			[D 7	7]	ENGLISH (Second edition) (D 01 G)
7/00 7/02	Breaking or opening fibre bales . by means of beater arms	15/18		•	. Workers; Strippers; Doffers (doffers specially adapted for web dividing
7/04	. by means of toothed members				15/54)
7/06	. Details of apparatus or machines	15/20		:	. Feed rollers; Takers-in
7/08	Arrangements for feeding bales to commi-	15/22			. Fancies
	nuting elements	15/24			. Flats or like members
7/10	Arrangements for discharging fibres	15/26			Arrangements or disposition of carding
7/12	Framework; Casings; Coverings; Grids				elements
7/14	Driving arrangements	15/28		•	Supporting arrangements for carding
	b.		~		elements; Arrangements for adjusting
9/00	Opening or cleaning fibres, e.g. scutching cotton	15/30			relative positions of carding elements. Bends
	(scutching flax or like fibres D 01 B; making	15/30 $15/32$		•	Framework; Casings; Coverings
	cellulose wadding in paper-making machines	15/34	• •	÷	Grids; Dirt knives; Angle blades
	D 21 F 11/14)	15/36		•	Driving or speed control arrangements
9/02	. by agitation within a moving receptacle	15/38			. for use during the grinding of card
9/04	. by means of beater arms				clothing
9/06	. by means of toothed members	15/40			Feeding apparatus (fibre-feeding appa-
9/08 9/10	 by means of air draught arrangements using foraminous cyclinders (foraminous 				ratus of general application to fibre-
9/10	suction cylinders for lap-forming 25/00)				treating machines, e.g. hopper feeders,
9/12	Combinations of opening or cleaning machines	45/40			23/00)
9/14	. Details of machines or apparatus	15/42 15/44		•	. Feeding from laps
9/16	Feeding arrangements (fibre-feeding	15/44	• •	•	. Intermediate feeds
,	apparatus of general application in fibre-	13/40		•	Doffing or like arrangements for re- moving fibres from carding elements;
	treating machines 23/00)				Web-dividing apparatus; Condensers
9/18	Arrangements for discharging fibres				(lap-forming devices 25/00; fibre con-
9/20	Framework; Casings; Coverings; Grids				densing guides D 01 H 5/72)
9/22	Driving arrangements	15/48			. Stripping-combs
		15/50	, ,		Stripping-rollers or like devices
		15/52			. Web-dividing arrangements
11/00	Disintegrating fibre-containing articles to obtain	15/54			employing doffers specially
11 /00	fibres for re-use	4 = /= 0			adapted for web dividing
11/02	. Opening, unravelling, or teasing ropes or like	15/56		•	employing tapes
11/04	fibrous strands to obtain fibres for re-use Opening rags to obtain fibres for re-use	15/58 15/60	• •	•	. Sliver or like rubbing apparatus
11/04	(mechanical treatment of rags for paper-	15/62	•	•	Constructions of rubbing leathers . Slubbing-winding apparatus (winding
	making D 21 B)	10,02	•	•	apparatus of general application to
					the winding of filamentary material
					B 65 H)
13/00	Mixing, e.g. blending, fibres; Mixing non-fibrous	15/64			. Drafting or twisting apparatus asso-
	materials with fibres (mixing of fibres combined				ciated with doffing arrangements or
	with other operations, e.g. bale-breaking or	15 /00			with web-dividing apparatus
	fibre-opening, see appropriate groups for such	15/66		•	with arrangements inserting false
	operations)	15/68			twist (false twist devices D 01 H) . with arrangements inserting per-
		10,00	•	• •	manent twist, e.g. spinning
15/00	Carding machines and accessories; Card clothing;	15/70		. A	rrangements for producing decorative or
·	Burr-crushing or removing arrangements asso-				ncy effects in products
	ciated with carding or other preliminary treat-	15/72			rrangements for returning waste to be
	ment machines (de-burring apparatus or				e-carded
15 /00	machines operating independently D 01 B)	15/74		. А	ir draught arrangements (air draught
15/02	. Carding machines				rrangements for stripping or for remov-
15/04	with worker and stripper or like rollers	15 /20		in	g dust or fly 15/76)
	operating in association with a main cylinder	15/76		otri Inini	ping or cleaning carding surfaces; Main- ng cleanliness of carding area
15/06	Garnett machine	15/78			rrangements for stripping flats
15/08	with flats or like members or endless card	15/80	•		rrangements for stripping cylinders or
	sheets operating in association with a main	,	•		ollers
	cylinder	15/82		. A	rrangements for confining or removing
15/10	with other apparatus, e.g. drafting devices,				ıst, fly, or the like
	in integral or closely-associated combina-	15/84			clothing; Manufacture thereof not other-
	tion (web-dividing apparatus 15/46; burr-		1	wise	provided for (arrangements for driving
15/12	crushing or removing arrangements 15/94)				ing-machine elements during grinding
15/12 $15/14$. Details Constructional features of carding ele-	15 /06			8; grinding card clothing B 24 B)
10/17	ments, e.g. for facilitating attachment of	15/86 15/88	•		ith flexible non-metallic backing rmed from metal sheets or strips
	card clothing	15/90	• •		ags, e.g. for jute cards
15/16	Main cylinders; Breasts	15/92			ttaching card clothing to carding elements
	· · · · · · · · · · · · · · · · · · ·	, .			2 to an aring committee

(D 01 G,	H) ENGLISH (Second edition) [D 8]		
15/94 15/96 15/98 17/00	 Burr-crushing or removing arrangements Burr-crushing rollers Morel or like apparatus Silk-dressing machines	23/06	Arrangements in which a machine or apparatus is regulated in response to changes in the volume or weight of fibres fed, e.g. piano motions (arrangements in which draft is regulated in response to irregularities in fibre supply D 01 H)
19/00	Combing machines	23/08	. Air draught or like pneumatic arrangements
19/02	with pinned circles, e.g. Noble	,	· · armabar or production arrangements
19/04	. with pinned cylinders, e.g. rectilinear	05 /00	
19/06	. Details	25/00	Lap-forming devices not integral with machines
19/08	Feeding apparatus		specified above (forming mats or batts of con-
19/10	Construction, mounting, or operating fea-		tinuous filaments for non-woven fabrics D 04 H)
	tures of combing elements .		
19/12	Devices for laying or holding fibres in combs, e.g. dabbing brushes	27/00	Lap or sliver winding devices, e.g. for products of cotton scutchers, jute cards, or worsted gill
19/14	Drawing-off and delivery apparatus		boxes (winding apparatus of general application
19/16	Nipper mechanisms		for the winding of filamentary material B 65 H)
19/18	Roller, or roller and apron, devices, e.g. operating to draw-off fibres continuously	27/02	 with lap-roll or the like loaded to provide firm packages
19/20	operating to draw-off fibres intermittently	27/04	. with automatic discharge of lap-roll or the like
19/22	Arrangements for removing or disposing of		
	noil or waste	29/00	Arrangements for lubricating fibres, e.g. in gill
19/24	. Framework; Casings; Coverings	· ·	boxes (processes involving the use of particular
19/26	. Driving arrangements		lubricants D 06 M 15/00)
19/28	Air draught or like pneumatic arrange-		•
19/30	ments Heating arrangements	31/00	Warning or safety devices, e.g. automatic fault detectors, stop motions (safety devices of general
21/00	Combinations of machines, apparatus, or processes, e.g. for continuous processing (1/06, 9/12, 15/46, 15/94 take precedence)		application F 16 P; indicating devices of general application G 08 B)
	· · · · · · · · · · · · · · · · · · ·	33/00	Hand tools for treatment of fibres
23/00	Feeding fibres to machines; Conveying fibres	30,00	
	between machines (21/00 takes precedence;	05 /00	m
	intermediate feeds in carding machines 15/40)	35/00	Treatment of oakum
23/02	. Hoppers; Delivery shoots		
23/04	with means for regulating rate of feed	37/00	Other preliminary treatment of fibres
	*		

D 01 H SPINNING OR TWISTING (unwinding, paying-out, forwarding, winding, or coiling filamentary material, not intimately associated with spinning or twisting B 65 H; cores, formers, supports or holders for coiled or wound material, e.g. bobbins, B 65 H; twisting oakum D 01 G 35/00; crimping or curling of fibres, filaments, or yarns D 02 G 1/00; making chenille D 03 D, D 04 D 3/00; testing yarns, rovings, slivers, fibres, or fibre webs G 01)

Note

Sub-class Index SPINNING OR TWISTING MACHINES			COMMON STRUCTURAL FEATURES, DETAILS, OR ACCESSORIES					
With continuous wind-up; with in mittent wind-up Drafting; twisting	ter- 1/00; 3/00 5/00; 7/00	or a	acing bobbins; confining or oving dust or fly 9/00; 11/00 er structural features, details, ccessories 13/00 eing arrangements; hand tools 15/00; 17/00					
Kinds or types of spinning or twistimachines or arrangements; Twistin 1/00 Spinning or twisting machine duct is wound-up continuous 1/02 Ring type 1/04 Flyer type 1/06 Cap type 1/08 Cup, pot, or disc type, in of yarn are formed by 1/10 for imparting multiple twisting 1/12 and twist is inserted in dently-moving fibres se	g arrangements mes in which the pro- usly n which annular masses centrifugal action twist, e.g. two-for-one to groups of indepen-	1/14 1/16 1/18 1/20 1/22 1/24	from a strand, i.e. break spinning Details (drafting arrangements 5/00; twisting arrangements 7/00) Framework; Casings; Coverings Supports for supply packages (package supports of general application for supplying filamentary material B 65 H) Driving or stopping arrangements (safety devices 13/14) for rollers (regulating or varying draft 5/32) for twisting arrangements, e.g. spindles (braking arrangements for spindles					

					•		•	•
1 /041				7/22; interrelated flyer and bobbin drive mechanisms 7/50)	5/02	•	.in	ill boxes or other drafting machines employ- ng fallers or like pinned bars (lubricating
1/241		•	•	driven by belt	e /0.4		11	bres in gill boxes D 01 G 29/00)
1/242		•	•	driven by toothed wheels	5/04	•	•	with pinned bars actuated by screw
1/243		•	•	driven by friction discs	E /00			members
1/244	•		•	each spindle driven by an electric	5/06	•	•	intersecting gill boxes
4 /00				motor	5/08	•	•	with bars connected by links, chains, or the
1/26	•	•	•	with two or more speeds; with	- /10			like
				variable speed arrangements	5/10	•	٠	with pinned bars unconnected with each
1/28		•	•	. for two or more machine elements pos-				other but actuated through pressure of one
				sessing different characteristics but in				against another
				operative association	5/12	•	٠	Details
1/30		•	•	with two or more speeds; with vari-	5/14	*	٠	. Pinned bars
				able speed arrangements	5/16	•	<u>.</u>	. Framework; Casings; Coverings
1/32			•	. for complete machines	5/18	•		rafting machines or arrangements without
1/34			•	with two or more speeds; with variable			fa	allers or like pinned bars
				speed arrangements	5/20	•		in which fibres are controlled by contact
1/36	•			Package-shaping arrangements, e.g.				with stationary or reciprocating surfaces
				building motions	5/22	. •		in which fibres are controlled by rollers
1/38				Arrangements for winding reserve lengths				only
				of yarn on take-up packages, e.g. transfer	5/24			. with porcupines or like pinned rotary
				tails				members
1/40				Arrangements for connecting continuously-	5/26		•	in which fibres are controlled by one or
				delivered material to bobbins or the like				more endless aprons
				(arrangements for securing yarn to bobbins,	5/28			in which fibres are controlled by inserting
				cores, or the like of general application in				twist during drafting (mules 3/00; con-
				the winding of filamentary material B 65 H)				structions of false-twist devices D 02 G
1/42				Guards or protectors for yarns or threads,				1/04)
• =				e.g. separator plates, anti-ballooning	5/30			incorporating arrangements for severing
	•			devices (anti-ballooning devices on spindles	•			continuous filaments, e.g. in direct spinning
				7/18; anti-ballooning devices in winding				(converting tows to slivers or yarns
				apparatus B 65 H 59/00)				D 01 G 1/06)
					5/32			Regulating or varying draft
					5/34			by manual adjustments
3/00		81	in	ing or twisting machines in which the pro-	5/38			according to a pre-arranged pattern, e.g.
-,				s wound-up intermittently, e.g. mules				to produce slubs
3/02				etails (drafting arrangements 5/00; twisting	5/38			in response to irregularities in material
, –				rangements 7/00)	5/40			employing mechanical time-delay
3/04				Carriages; Mechanisms effecting carriage				devices
				movements	5/42			employing electrical time-delay
3/06				. Carriages; Carriage rails; Squaring				devices
				motions	5/44			. Adjusting drafting elements, e.g. altering
3/08				. Drawing-out or taking-in motions				ratch
3/10				. Moving-creel arrangements, e.g. for	5/46			. Loading arrangements
				twiners (creels of general interest in	5/48			using weights
				providing a supply of filamentary ma-	5/50			using springs
				terial B 65 H)	5/52			using fluid pressure
3/12				Package-shaping motions; Faller arrange-	5/54			using magnetic arrangements
				ments	5/56			. Supports for drafting elements (saddles or
3/14				Roller-driving arrangements (drafting				top roller arms forming essential com-
				arrangements of general application in				ponents of weighting arrangements 5/48)
				spinning machines 5/18)	5/58			. Arrangements for traversing drafting ele-
3/16				Spindle-driving arrangements (spindles,				ments (traversing arrangements for roving
				spindle bearings, spindle supports 7/04)		,		guides 13/06)
3/18				. Tin rollers; Driving arrangements inti-	5/60			. Arrangements maintaining drafting elements
•				mately associated with tin rollers				free of fibre accumulations
3/20)			. Spindle-driving arrangements during	5/62			Non-rotary cleaning pads or plates;
•				drawing-out or backing-off				Scrapers
3/22	!			. Spindle-driving arrangements during	5/64			Rollers or aprons with cleaning surfaces
				taking-in	5/66			Suction devices
3/24	:			Quadrant motions; Nosing motions	5/68			Suction end-catchers
3/26				Driving or stopping arrangements not	5/70			. Constructional features of drafting elements
.,			-	otherwise provided for; Locking motions	5/72			. Fibre-condensing guides (guides for
				(safety devices 13/14)	-,	•		slivers, rovings, or varns applicable
				· ·				solely for spinning, twisting, curling, or
						1,		crimping purposes 13/04; guides of
5/00)	D	ra	ting machines or arrangements (arrange-				general application for handling fila-
., ,-				s in which draft is dependent on linear		•		mentary material B 65 H)
				ement of take-up spindles, e.g. in mules,	5/74	_		Rollers
			/00		5/76			Loose-boss assemblies

5/78				. with flutes or other integral surface	7/70	Arrangements for supporting caps or
- /00				characteristics	7/72	spindles
5/80 5/8 2	•	•	•	 with covers; Cots or covers Arrangements for coupling roller sections 	1/12	 Bobbin supporting arrangements, e.g bobbin rails (poker guides and other rail supports 7/10)
5/84				. Porcupines	7/74	Cup or like arrangements
5/86	•	•	•	Aprons; Apron supports; Apron tensioning		Rotary discs
,,,,	•		•	arrangements	7/78	Constructions of cups, e.g. spinning
5/88				. Cradles; Tensors	·	boxes
					7/80	adapted to collect wet yarns
7/00				arrangements	7/82	Casings or guards for rotary cups or
7/02				nparting permanent twist	_ /	the like
7/04	•	•		indles (spindle bearings, supports there-	7/84	Spindles or yarn carriers for co-ope
7 /06				c, in general F 16 C)		tion with rotary cups (removing yarr
7/06	•	•	•	Stationary spindles with package-holding sleeves		from centrifugal cups on to yarn car riers 9/06)
7/08				Mounting arrangements	7/86	Multiple-twist arrangements, e.g. two-fe
7/10	•	•	•	. Spindle supports; Rails; Rail supports,		one twisting devices
.,	•	•	•	e.g. poker guides	7/88	Hollow spindle arrangements (7/86 take
7/12				. Bolsters; Bearings	.,	precedence)
7/14				. Holding-down arrangements	7/90	Arrangements with two or more twistin
7/16				Arrangements for coupling bobbins or		devices in combination $(7/86, 7/88)$ take
				like to spindles	_	precedence)
7/18	•	•	•	Arrangements on spindles for suppressing yarn balloons (thread guards or	7/92	. for imparting transient twist
				protectors 1/42)		
7/20		•		Lubricating arrangements	Commo	on features or details of, or accessories for, spi
7/22	•	•		Braking arrangements	ning or	twisting machines of various kinds or types (d
7/24	•	•		yer and like arrangements (multiple-	ing arr	angements 5/00; twisting arrangements 7/00)
				ist arrangements 7/86; flyers solely for	9/00	Arrangements for replacing or removing bob
				iding filamentary material during		cores, receptacles, or completed packages at
7/26	,			winding B 65 H) Flyer constructions		paying-out or take-up stations (arrangements
7/28	•	•		, arranged to guide material over		general interest in the winding of filamentary
1/20	•	•	•	exterior of legs		material B 65 H)
7/30		_		with guide channels formed in legs,	9/02	. for removing completed take-up packages
.,	•	•	•	e.g. slubbing flyers		replacing by bobbins, cores, or receptacles
7/32				with pressing devices		take-up stations; Transferring material be
7/34				. with haul pulleys or like arrange-	9/04	tween adjacent full and empty take-up elem . Doffing arrangements integral with spir
				ments	5/04	or twisting machines
7/36	•	•	3	. with traversing devices	9/06	Removing yarn from centrifugal cup
7/38	•	•	٠	. Ring flyers		to yarn carriers
7/40 7/42	•	•	•	Flyer supports, e.g. rails Arrangements coupling flyers to spindle	9/08	Doffing arrangements independent of sp
7/44	•	:	•	Drag arrangements for bobbins or		ning or twisting machines
•, ••	•	•	•	flyers	9/10	Doffing carriages
7/46				Devices attached to or integral with	9/12	Manual cop-tube applying apparatus;
.,	•	•	•	flyers for temporarily increasing twist	0 /1 4	Stands for cop-tube applying apparat
				in material passing to them	9/14	for preparing machines for doffing of y
7/48				Eyes or like guiding arrangements		(stop-motions responsive to delivery of measured length of material 13/24)
				(7/46 takes precedence)	9/16	
7/50				Interrelated flyer and bobbin drive	9/18	 Yarn-severing arrangements for supplying bobbins, cores, receptacles, or
				mechanisms, e.g. winding-on motions	0/10	completed packages to, or transporting fro
				for cotton roving frames (package		paying-out or take-up stations (9/10 takes
- /- O			n	building mechanisms 1/36)		precedence)
	•	•	Kı	ng and traveller arrangements		•
7/52	•	•	•	with fixed rings with freely-rotatable rings; with braked	11/00	Arrangements for confining or removing dust
7/54	•	•	•	or dragged rings	• • •	fly, or the like (independent arrangements B
7/54		_	_	with driven rings		F 24 F)
7/54 7/56				Rings or travellers; Manufacture thereof		
7/54 7/56 7/58		:		not otherwise provided for (hand tools	13/00	Other common constructional features, detail
7/54 7/56	•				•	or accessories
7/54 7/56 7/58	:	•		for applying travellers to rings 17/02)		
7/54 7/56 7/58	•	•	•	for applying travellers to rings 17/02) Arrangements providing lubricant for	13/02	. Roller arrangements not otherwise provid
7/54 7/56 7/58 7/60 7/62	•	•	•	for applying travellers to rings 17/02) Arrangements providing lubricant for travellers		Roller arrangements not otherwise provid for
7/54 7/56 7/58 7/60		•		for applying travellers to rings 17/02) Arrangements providing lubricant for travellers Ring supports, e.g. ring rails (poker	13/02 13/04	Roller arrangements not otherwise provid for Guides for slivers, rovings, or yarns; Smoo
7/54 7/56 7/58 7/60 7/62	:			for applying travellers to rings 17/02) Arrangements providing lubricant for travellers Ring supports, e.g. ring rails (poker guides and other rail supports 7/10)		Roller arrangements not otherwise provid for Guides for slivers, rovings, or yarns; Smoo ing dies (fibre-condensing guides 5/72; gui
7/54 7/56 7/58 7/60 7/62 7/64				for applying travellers to rings 17/02) Arrangements providing lubricant for travellers Ring supports, e.g. ring rails (poker		Roller arrangements not otherwise provid for

13/06 13/08 13/10	 . Traversing arrangements . Twist arresters . Tension devices (tension devices of general application to filamentary material B 65 H) 	13/24 . responsive to delivery of a measured length of material, completion of winding of a package or filing of a receptacle 13/26 . Arrangements facilitating the inspection or
13/12	. Arrangements preventing snarls or inadvertent doubling of yarns (suction end-catchers 5/68)	testing of yarns or the like in connection with spinning or twisting 13/28 Heating or cooling arrangements
13/14	Warning or safety devices, e.g. automatic fault detectors, stop motions (warning or safety devices for filamentary material, not intimately associated with spinning or like machines B 65 H; safety devices of general application F 16 P; indicating devices of general application G 08 B)	t 13/30 . Moistening, sizing, oiling, waxing, colouring, or drying yarns or the like as incidental measures during spinning or twisting 13/32 . Counting, measuring, recording or registering devices (in general in the appropriate class in Section G, e.g. G 01 B)
13/16 13/18	responsive to reduction in material tension failure of supply, or breakage, of material	15/00 Piecing arrangements (in machines for producing textile fabrics, see appropriate sub-classes; of general interest in connection with the forward-
13/10	stopping supply only responsive to excessive tension or irre-	ing or winding of filamentary material B 65 H)
20/20	gular operation of apparatus	17/00 Hand tools (cop-tube applying apparatus 9/12)
13/22	responsive to presence of irregularities in running material	17/02 . Arrangements for storing ring travellers; Devices for applying travellers to rings

D 02 YARNS; MECHANICAL FINISHING OF YARNS OR ROPES; WARPING OR BEAMING

Explanatory note

In this class, the following words are used with the meanings indicated:

- (a) "fibre" means a relatively-short, elongated member of natural or artificial material.
- (b) "filament" means an endless or quasi-endless, elongated member of natural or artificial material.
- (c) "yarn" means a unitary assembly of fibres, usually produced by spinning.
- (d) "thread" means an assembly of yarns or filaments, usually produced by twisting.

D 02 G CRIMPING OR CURLING FIBRES, FILAMENTS, YARNS OR THREADS; YARNS OR THREADS

Note

Attention is drawn to the note following the class title (D 02).

_					
1/00	Producing crimped or curled fibres, filaments,	3/08	•		Paper yarns or threads
	yarns, or threads, giving them latent characteris-	3/10			Yarns or threads formed from collagenous
	tics (yarns per se 3/00; during formation of				materials, e.g. catgut
	artificial filaments, threads, or the like D 01 D	3/12			Threads containing metallic filaments or
	5/22; general aspects of chemical treatment				strips
	D 06 M)	3/14			Horse-hair threads
1/02	by twisting, fixing the twist and backtwisting,	3/16			Yarns or threads made from mineral sub-
	i.e. by imparting false twist				stances
1/04	Devices for imparting false twist	3/18			. from glass or the like
1/06	Spindles	3/20			. from asbestos
1/08	Rollers	3/22	•	Ÿ	arns or threads characterised by construc-
1/10	. using knife edges, e.g. heated knife edges, for				onal features
-,	edge crimping	3/24		·	Bulked yarns or threads, e.g. formed from
1/12	. using stuffer boxes				staple fibre components with different
1/14	, using grooved rollers or gear-wheel-type				relaxation characteristics
-,	members	3/26			with characteristics dependent on the
1/16	. using jets or streams of turbulent gases, e.g.	•			amount or direction of twist
	air, steam	3/28			. Doubled, plied, or cabled threads
1/18	. by combining fibres, filaments, or yarns,	3/30			. Creped or other highly-twisted yarns or
-,	having different shrinkage characteristics	•			threads
1/20	. Combinations of two or more of the above-	3/32			Elastic yarns or threads
-,	mentioned operations or devices; After-treat-	3/34			Yarns or threads having slubs, knops,
	ments for fixing crimp or curl				spirals, loops, tufts, or other irregular or
					decorative effects, i.e. effect yarns
3/00	Yarns of threads, e.g. fancy yarns; Processes or	3/36			Cored or coated yarns or threads (elastic
-,	apparatus for the production thereof, not other-	•			yarns or threads 3/32)
	wise provided for (for producing crimped or	3/38			Threads in which fibres, filaments, or
	curled yarns 1/00)				yarns are wound with other yarns or
3/02	. Yarns or threads characterised by the mate-				filaments
	rial or by the materials from which they are	3/40			Yarns in which fibres are united by ad-
	made	·			hesives; Impregnated yarns or threads
3/04	Blended or other yarns or threads	3/42			Chenille threads
	containing components made from different	3/44		Y	arns or threads characterisied by the pur-
	materials				ose for which they are designed
3/06	Threads formed from strip material other	3/46			
-,	than paper	3/48			
	• ····································				•

D 02 H WARPING, BEAMING OR LEASING

Note

Sub-class Index			LEAS	ING .	9/00
CREEL		1/00	OTHER MACHINES AND METHODS		11/00
WARPING; BEAMING; WARPING AND BEAMING COMBINED		3/00; 5/00; 7/00	DETAILS OF MACHINES		13/00
1/00	of individual threads		5/00 5/02	Beaming machines . combined with apparatus for sizing or o	
3/00				treatment of warps (sizing per se D 06	

		{D	13J	ENGLISH (Second edition) (D 02 H, J)
7/00	Combined warping and beaming machines	13/10	•	responsive to thread-measuring devices, e.g. stopping the machines when required length of warp has been wound
9/00	Leasing	13/12		Variable-speed driving mechanisms
9/02	. Lease rods and bands	13/14	•	. controlled automatically by tension in the warp
		13/16		Reeds, combs, or other devices for determin-
11/00	Methods or apparatus not provided for in the			ing the spacing of threads
,	preceding groups, e.g. for cleaning the warp	13/18		. with adjustable spacing
	Francisco Branks, and Branks	13/20		. with fixed spacing
		13/22		Tensioning devices
13/00	Details of machines of the preceding groups (of	13/24		. for individual threads
10,00	eneral interest for the handling of filamentary	13/26		for threads in warp form (controlling the
	material B 65 H)	13/20	•	driving of beams, etc. to keep tension con-
13/02	. Stop motions			stant 13/14)
,		13/28		Warp beams (cloth beams D 03 D 49/20)
13/04	responsive to breakage, slackness, or			• • • • • • • • • • • • • • • • • • • •
	excessive tension of threads, with detectors	13/30		. with flanges
	for individual threads or small groups of	13/32		. adjustable
	threads	13/34		. sectional
13/06	mechanical	13/36		. Means for attaching warp to beam
13/08	electrical	13/38		Storage racks for beams

DO2J FINISHING OR DRESSING OF FILAMENTS, YARNS, THREADS, CORDS, ROPES OR THE LIKE (see D. 06 L. M., P. Q for chemical matters) (curling or crimping D 02 G; by treatment with liquids, gases or vapours D 06 B. finishing other than by liquid treatment, of yarns in warp or sheet form D 06 C; treatment during rope-making, apparatus for treating ropes auxiliary to rope-making D 07 B)

Note

Attention is drawn to the explanatory note following the class title (D 02).

Sub-class Index			CESSES NOT COVERED BY ONE				
	YING THE STRUCTURE, OR SURFACE 1/00, 3/00	SINGLE	E GROUP 11/00				
1,00,0,00		HEATI	HEATING OR COOLING OPERATIONS NOT SPECIFIC TO ONE OF THE				
RÉMOV	REMOVING UNDESIRABLE BODIES 7/00		PROCESSES 13/00				
1/00	Modifying the structure or properties re- from a particular structure; Modifying, re- or restoring the physical form or cross-	etaining,	by abrading, scraping, scuffing, cutting, or nicking (preliminary roughening of fibres, e.g. for spinning, D 01 G 3/00)				
	shape, e.g. by use of dies or squeeze rolle	ers 3/04	, by brushing				
	(modifying only the surface 3/00)	3/06	. by polishing, e.g. glazing, glossing				
1/02	 Bulking, e.g. looping (by crimping, by c D 02 G) 	eurling 3/08	 by compressing, e.g. by calendering or ironing 				
1/04	. Compacting	3/10	. by indenting				
1/06	. Imparting irregularity, e.g. slubbing or		. by removing projecting ends of fibres				
	non-uniform features, e.g. high and lov	v shrink- 3/14	by shearing				
	age or strengthened and weakened sec		by singeing				
1/08	 Interlacing constituent filaments without breakage thereof, e.g. by use of turbule streams Modifying stretch bulk properties of tyarns or the like by after-treatment 	ent air extured	. Treating with particulate, semi-solid, or solid substances, e.g. wax (during package formation B 65 H 71/00; waxing yarns or the like as incidental measures during spinning or twist- ing D 01 H 13/30)				
1/14	. Rendering uniform or evening non-uni features	7/00	Cleaning, e.g. removing dust, loose fibres, charred				
1/16	. Rubbing or similar working, e.g. to re- bute or remove fibres	distri-	ends (in combination with the shearing, singeing, or otherwise removing of projecting fibre ends 3/12, 3/14, 3/16)				
1/18	. Separating or spreading		3/12, 3/14, 3/10)				
1/20	Stressing or stress-relieving, e.g. by or subjection to electrostatic stress of tric discharge	r elec-	Combinations, not covered by any one of the pre- ceding groups, of processes provided for in such groups; Plant for carrying out such combinations				
1/22	. Stretching or tensioning, shrinking or e.g. by use of overfeed and underfeed:	appara-	of processes				
	tus, or preventing stretch (stretch spin D 01 D 5/12)	nning 13/00	Heating or cooling the yarn, thread, cord, rope, or the like, not specific to any one of the processes provided for in this sub-class (heating, cooling or drying during spinning or twisting D 01 H;				
3/00	Modifying the surface		drying of yarns etc. in general F 26 B)				

D 03 WEAVING

D 03 C SHEDDING MECHANISMS; PATTERN CARDS AND CHAINS; PUNCHING OF CARDS; DESIGNING PATTERNS

Sub-class Index			Selvedge mechanisms not forming par of shedding mechanisms 11/00		
SHEDDING MECHANISMS			Other shedding mechanisms 7/00,		
	s; jacquards; cam and other acting mechanisms 1/00; 3/00; 5/00 9/00	CARD-P	RN CARDS AND CHAINS; UNCHING; METHODS AND S FOR PREPARING PAT-	, ,	
	Dobbies Single-lift dobbies, i.e. dobbies in which the same draw-knife or equivalent operates for every pick (1/10 takes precedence)	3/16 3/18	Verdol and other jacquard diate power-operated need needles and lifting hooks Selvedge jacquards		
1/04 1/06	 Open-shed single-lift dobbies Double-lift dobbies, i.e. dobbies in which separate draw-knives or equivalent operate on alternate picks 	3/20 3/22 3/24	 Electrically-operated jacquards Fluid-operated jacquards Features common to jacquards types 		
1/08 1/10	 reversible, i.e. correct sheds open automatically when the loom is driven backwards Centre-shed dobbies, i.e. shed formed by 	3/26 3/28	General arrangements disposition in relation Pick-finding arrangement for preventing next she	to loom ents; Arrangements	
1/12	lifting some threads and lowering the others from central shed-closed position Dobbies employing toothed gearing instead o	3/30 f	during stopping of loom . Arrangements wherein operated to close shed	hooks are positively	
1/14	draw-knives Features common to dobbies of different typ (stop motions acting on defective operation of shedding mechanisms D 03 D 51/46)		. Jacquard driving mech Cylinder operating i Griffe operating mech Comber boards	nechanisms	
1/18 1/20 1/22	 Arrangements of dobby in relation to loor Knives; Knife frames Hooks; Lifters Needles; Needle boxes; Needle boards 		Constructions of lifting . Arrangements of lifting . Lingoes		
1/24 1/26 1/28	 Cylinders; Cylinder battens Facilitating engagement of lifting-hooks with draw knives by creating and then eliminating back- 	5/00	Cam and other direct-acting nisms, i.e. operating heald fr vening power-supplying device	ames without inter-	
1/30	lash between hooks and knives wherein all the hooks are disengaged from the knives, and selected hooks the	5/02 5/04	operated by rotating cams Construction or shape general F 16 H 53/00) operated by cam devices of	of cams (cams in	
1/32	re-engaged wherein all the hooks are engaged with the knives, and unselected hooks then disengaged	n	cams	_	
1/34	. Arrangements wherein warp threads pass one another at different heights to avoid congestion	7/ 00 7/02 7/04	Leno and similar shedding m . Gauze healds . Mechanisms having discs weftwise axis and having a	oscillating about a	
1/36 3/00	Card or chain saving arrangements, e.g. cross-border dobbies Jacquards (controlling jacquard by scanning	7/06	threads . Mechanisms having eyed a warp threads from side to	needles for moving	
•	design 17/06; for gripper Axminster looms D 03 D 39/08)	7/08	threads . Devices for twisting warp in the same direction	threads repeatedly	
3/02 3/04 3/06 3/08 3/10 3/12	 Single-lift jacquards of open-shed type Double-lift jacquards of open-shed type Centre-shed jacquards Multiple-shed jacquards, i.e. jacquards which move warp threads to several different 	9/00 9/02 9/04 h 9/06	Healds; Heald frames (for le . Healds . Metal healds . Heald frames	no shedding 7/00)	
3/14	heights, e.g. for weaving pile fabrics Jacquards not employing lifting hooks, e.g. employing knotted cords in conjunction with keyhole slots	11/00	Selvedge shedding mechanism of main shedding mechanism 3/18; leno selvedge mechanism	(selvedge jacquards	

13/00	Shedding mechanisms not otherwise provided for	17/00 17/02	Card-punching apparatus (marking record carriers in digital fashion G 06 K) . manually controlled, i.e. holes to be punched
15/00	Pattern cards and chains	, 02	determined by the operator
15/02	. Chains of metal, wood, or similar material with projecting pattern-indicating elements	17/04 17/06	power-operated automatic, i.e. design scanned optically or
15/04	. Cards or paper perforated to indicate pattern	21,00	otherwise to control punching apparatus or to
15/06	. Apparatus for setting pegs in, or removing pegs from, pattern cards		control loom jacquard directly
15/08	 Apparatus for interconnecting, e.g. by lacing, or disconnecting pattern cards 	19/00	Miscellaneous methods and devices concerned with designing and making patterns

D 03 D WOVEN FABRICS; METHODS OF WEAVING; LOOMS

Note on scope

Where the balance of invention, as between the present sub-class (D 03 D) and the sub-classes of class D 06, is in doubt in respect of inventions concerning processes which involve both weaving and finishing steps and in respect of inventions concerning the finished fabrics, the inventions are to be classified in D 06 rather than in D 03 D.

In this sub-class:

- (1) A method of weaving is covered by the group designating the fabric woven unless the method is characterised by the operation of a particular loom rather than by the production of a particular fabric. In this case, the method is covered by the group for the loom.
- (2) For the purpose of classification of inventions, if there is any doubt as to which of the essential features of an invention is the most important (this is usually the most restrictive feature), the groups of this subclass designating woven fabrics should be considered in the order in which they appear at each level of indentation, except that groups designating woven pile fabrics are to be considered as taking precedence over groups designating other woven fabrics.

Sub-class Index			eneral weaving methods not spe- al to a particular fabric or loom	99 /00	
WOVEN FABRICS AND CORRESPONDING WEAVING METHODS		LOO	MS AND CORRESPONDING THODS OF WEAVING	23/00	
Characterised by: the construction		н	and looms	29/00	
of the yarn or the material; their shape; their resiliency; their elas- ticity	15/00; 3/00; 7/00; 17/00	Characterised by the article to be woven: lappet swivel type for embroidery-like decoration; for narrow ribbon-like fabrics; for			
Kinds of woven fabrics			ile fabric; other types for other		
open-work fabrics; woven pile fabrics; gauze; lappet or swivel		ki	inds of fabrics	31/00; 35/00; 39/00; 41/00	
woven	9/00; 27/00; 19/00; 21/00	Characterised by their construc- tion: circular; with change-boxes;			
with special disposition of warp or weft threads; multi-ply fab-			ith automatic weft replenishment; shuttleless type	37/00; 43/00; 45/00; 47/00	
rics not otherwise provided for	13/00;11/00	М	Multiple looms	33/00	
for specified articles	1/00		eneral details and constructional	33/00	
other kinds	25/00	features Driving, starting, stopping the lo		49/00	
Selvedges	5/00, 47/40			51/00	
Woven fabrics; Methods of weaving ot characterised by the operation of a per 1/00 Woven fabrics designed to m	rticular loom	3/02 3/04 3/06	. Tubular fabrics . Endless fabrics . Fabrics of varying width		
articles	•	3/08	. Arched, corrugated, or like fal	brics	
1/02 . inflatable articles 1/04 . sack or bag-like articles 1/06 . curtain heading tapes		5/00	Selvedges		
1/08 . ladder tapes (ladder tapes blinds E 06 B 9/382)	per se for venetian	7/00	Woven fabrics designed to be res recover from compressive stres	silient, i.e. to s	
3/00 Woven fabrics characterised	by their shape	9/00	Open-work fabrics (ladder-tape f	abrics 1/08)	