

Title (en)

Face-to-face fabric with variable thickness, process of manufacturing and applications.

Title (de)

Abstandstextilmaterial variabler Dicke, Herstellungsverfahren und Verwendungen dazu.

Title (fr)

Tissu "face-à-face" à épaisseur variable, procédé de fabrication et applications.

Publication

EP 0617152 A1 19940928 (DE)

Application

EP 94101887 A 19940208

Priority

CH 54093 A 19930222

Abstract (en)

A material for replacing foamed materials is the face-to-face (spacer) textile material which consists of two woven or knitted top layers which are connected by a pile thread structure. This pile thread structure is responsible for the compressibility known from flexible foams and the large air content. The compliance can be determined through the length and density of the pile threads and the material used. If recyclable materials are used, they provide a way of obtaining an environmentally compatible foam replacement. In addition, the face-to-face textile material can, through the use of treated starting materials or through a treatment during or after making, be given chemical and physical properties and thus be used for example as a filter or catalyst material.

Abstract (de)

Ein Material zum Ersatz von geschäumten Stoffen ist das Abstandstextilmaterial, das aus zwei gewirkten, gestrickten oder gewobenen Deckschichten besteht, die durch eine Polfadenstruktur verbunden sind. Die Polfadenstruktur erzeugt dabei die von flexiblen Schaumstoffen bekannte Kompressibilität und den grossen Luftanteil. Die Nachgiebigkeit kann durch die Länge und Dichte der Polfäden und das verwendete Material bestimmt werden. Bei Verwendung recycelbarer Materialien kann damit ein umweltverträglicher Schaumstoffersatz erhalten werden. Darüber hinaus kann das Abstandstextilmaterial durch die Verwendung behandelten Ausgangsmaterials, eine Behandlung während oder nach der Herstellung noch chemische oder physikalische Eigenschaften erhalten und somit z. B. als Filter- oder Katalysatormaterial zum Einsatz kommen.

IPC 1-7

D03D 27/10; D04B 1/02

IPC 8 full level

B68G 1/00 (2006.01); **B60R 13/08** (2006.01); **D03D 3/00** (2006.01); **D03D 11/00** (2006.01); **D03D 15/40** (2021.01); **D03D 25/00** (2006.01); **D03D 27/10** (2006.01); **D04B 1/00** (2006.01); **D04B 1/14** (2006.01); **D04B 21/02** (2006.01); **D05C 17/00** (2006.01)

CPC (source: EP US)

D03D 11/02 (2013.01 - EP US); **D03D 27/10** (2013.01 - EP US); **D04B 1/16** (2013.01 - EP US); **D04B 1/22** (2013.01 - EP US); **D10B 2401/04** (2013.01 - EP US); **D10B 2403/0112** (2013.01 - EP US); **D10B 2403/021** (2013.01 - EP US); **D10B 2403/02421** (2013.01 - EP US); **D10B 2403/033** (2013.01 - EP US); **D10B 2505/02** (2013.01 - EP US); **D10B 2505/04** (2013.01 - EP US); **D10B 2505/08** (2013.01 - EP US); **D10B 2505/12** (2013.01 - EP US); **Y10S 55/43** (2013.01 - EP US); **Y10S 428/92** (2013.01 - EP US); **Y10T 428/23921** (2015.04 - EP US); **Y10T 428/23986** (2015.04 - EP US); **Y10T 428/249962** (2015.04 - EP US)

Citation (search report)

- [XA] GB 2009266 A 19790613 - EISER AB
- [PX] DE 4140826 A1 19930617 - WULFHORST BURKHARD PROF DR ING [DE]
- [X] DE 8903745 U1 19890511
- [X] DE 8902259 U1 19900412
- [X] DE 8901213 U1 19890406
- [X] DE 2839775 A1 19800327 - GIERLINGS GMBH & CO KG V, et al
- [X] DE 9206771 U1 19920730
- [A] GB 2234705 A 19910213 - SECR DEFENCE [GB]
- [A] DE 3716476 C1 19871217 - WAGENER SAERBECK TEXTIL
- [A] BE 414752 A

Cited by

NL2010739C2; DE102009018171B4; CN102787417A; DE29713312U1; GB2299814A; DE102013107800A1; IT201800006862A1; DE102020003913B3; FR2820763A1; EP0748889A3; DE102005049466A1; DE102011112289A1; EP1978846A4; EP0834610A3; DE102015111590B3; CZ307924B6; DE102006054587B4; EP4016521A1; EP0897029A3; EP3287106A1; CN110721530A; EP3777795A1; WO2011144888A1; US10537657B2; US11730876B2; US11172923B2; US10919479B2; DE102015111590C5; US11938231B2; US8376972B2; US9012714B2; US9555170B2; WO02064870A1; WO0234363A1; US9808561B2; US10159604B2; US11058587B2; US11090195B2; EP3936656A1; US11931226B2; US7607730B2; US9844473B2; US10278869B2; US10842678B2; WO111127A1; WO111128A1; WO2013108228A1; US9271730B2; US10194909B2; US9414840B2; US9801761B2; US10206755B2; US10231797B2; US11638666B2; EP3024349B1

Designated contracting state (EPC)

AT CH DE ES FR GB IT LI NL PT SE

DOCDB simple family (publication)

EP 0617152 A1 19940928; EP 0617152 B1 19990825; AT E183784 T1 19990915; CZ 35794 A3 19940914; CZ 6686 U1 19971023; DE 59408647 D1 19990930; JP H0849143 A 19960220; SK 21194 A3 19940907; US 5589245 A 19961231

DOCDB simple family (application)

EP 94101887 A 19940208; AT 94101887 T 19940208; CZ 35794 A 19940218; CZ 630297 U 19940218; DE 59408647 T 19940208; JP 4657294 A 19940222; SK 21194 A 19940222; US 20018594 A 19940222