

Title (en)  
Method for limiting the shed opening and shed limiting device

Title (de)  
Verfahren zum Begrenzen der Webfachöffnung und Webfachbegrenzer

Title (fr)  
Procédé pour limiter l'ouverture de la foule et limiteur de foule

Publication  
**EP 1055753 A1 20001129 (DE)**

Application  
**EP 00109781 A 20000509**

Priority  
DE 19924689 A 19990528

Abstract (en)  
To restrict the shed opening for the selvage warps at a jet loom, where the warps at the fabric edge are opened out for the insertion of a weft by a carrier air stream on weaving a fabric (8), the shed opening angle (  $\alpha$  ) is restricted at the selva by the laying depth of the tucked selvage in the weaving direction. The selvage warps opening angle (  $\alpha_1$  ) is smaller than the main shed opening angle (  $\alpha$  ). Where the loom is fitted with weft insertion jets, the selvage shed opening angle (  $\alpha_1$  ) during weft insertion is large than the clear vertical opening of the weft insertion channel (3a) in the reed (3). With a mechanical weft insertion system, the selv shed opening angles (  $\alpha_1$  ) is smaller than the vertical dimensions of the weft carrier. The selvage shed opening angle (  $\alpha_1$  ) can be adjusted. An Independent claim is included for a shed limit mechanism with a fork-shaped unit (4) with two tines (4a,4b). The tines are axially parallel, and are mounted to a carrier (5) to extend over the selvage width (7a) of the fabric, outside the front shed (6). The upper and lower warps (6a,6b) of the front shed (6) pass between the tines (4a,4b). The fork-sha unit (4) has an adjustable position with settings on the x-, y- and z-axes within the front shed (6) between the warp harness (2 and the reed (3). The fork tines (4a,4b) have an individual adjustment to set the gaps at the carrier (5) and also at a machine mounting (12). The fork tines (4a,4b) can have a suitable geometric cross section shape.

Abstract (de)  
Zur Ausbildung einer qualitätsgerechten, mittels pneumatischen Mitteln (9) gebildeten Einlegekante an einer Gewebebahn (8) ist die optimale Lage des in ein Webfach (6) zurückgeführten Endes (10a) eines angeschlagenen Schussfadens (10) maßgebend. Die optimale Lage wird erfindungsgemäß durch das Begrenzen des Fachöffnungswinkels  $\alpha$  der Randkettfäden (6a,6b) auf einen Fachöffnungswinkel  $\alpha_1$  erreicht, der kleiner als der Fachöffnungswinkel  $\alpha$  ist. Der Webfachbegrenzer (4) erstreckt sich dabei in Richtung der Webbreite (7) wenigstens auf die gewünschte Einlegetiefe bzw. Breite (7a) an der Gewebebahn (8). <IMAGE>

IPC 1-7  
**D03D 47/48**

IPC 8 full level  
**D03C 13/00** (2006.01); **D03D 47/30** (2006.01); **D03D 47/48** (2006.01); **D03J 1/02** (2006.01); **D03J 1/04** (2006.01)

CPC (source: EP US)  
**D03D 47/48** (2013.01 - EP US)

Citation (search report)  

- [Y] FR 837656 A 19390215
- [Y] EP 0534429 A1 19930331 - SOMET SOC MEC TESSILE [IT]
- [A] EP 0083905 A1 19830720 - SULZER AG [CH]
- [A] GB 1327924 A 19730822 - RUETI AG MASCHF
- [A] US 2938547 A 19600531 - RAYMOND DEWAS
- [A] FR 2262139 A1 19750919 - MACKIE & SONS LTD J [GB]
- [A] FR 1494833 A 19670915

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**EP 1055753 A1 20001129**; DE 19924689 C1 20010517; JP 2000355855 A 20001226; US 6240975 B1 20010605

DOCDB simple family (application)  
**EP 00109781 A 20000509**; DE 19924689 A 19990528; JP 2000154532 A 20000525; US 58028500 A 20000530