

Title (en)
Multi-layer shingle with shi lap joint

Title (de)
Mehrlagige Schindel mit seitlicher Verbindung

Title (fr)
Bardeau multicouche à recouvrement latéral

Publication
EP 1460197 A1 20040922 (EN)

Application
EP 04251503 A 20040317

Priority
US 39075603 A 20030319

Abstract (en)
A multi-layer laminate shingle (10) has a base layer (12) and at least a second layer (24) above the base layer. At one end of the shingle the base layer projects beyond the second layer while at the other end the second layer projects beyond the base layer. When the shingles are laid in a course along the roof, the projecting end of the second layer overlaps the projecting end of the base layer of the next shingle, forming a shi lap joint over all or substantially all of the width of the shingle, protecting the joint against rain penetration. This shi lap feature allows the head lap to exposure ratio of the shingle to be reduced to less than 1 and even to 0.5 or less, thus reducing the cost of shingles per unit of roof coverage area. If desired, a narrow strip can be adhered to the top of the head lap portion of the shingle or beneath the butt portion of the shingle to emulate the appearance of a costly triple laminate shingle. <IMAGE>

IPC 1-7
E04D 1/26; **E04D 1/28**

IPC 8 full level
E04D 1/26 (2006.01); **E04D 1/28** (2006.01)

CPC (source: EP US)
E04D 1/26 (2013.01 - EP US); **E04D 1/28** (2013.01 - EP US); **E04D 1/2916** (2019.07 - EP US); **E04D 1/2963** (2019.07 - EP US);
E04D 2001/005 (2013.01 - EP US)

Citation (search report)
• [XAY] US 1776949 A 19300930 - LUMBARD PHANETTE E
• [A] US 6092345 A 20000725 - KALKANOGLU HUSNU M [US], et al
• [YA] US 4015392 A 19770405 - EATON JAMES W
• [A] US 4468909 A 19840904 - EATON JAMES W [US]
• [A] US 1894615 A 19330117 - WETTLAUFRER JULES L
• [X] PATENT ABSTRACTS OF JAPAN

Cited by
RU2622973C2; US2019301160A1; US11414869B2; WO2014020370A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1460197 A1 20040922; US 2004182032 A1 20040923

DOCDB simple family (application)
EP 04251503 A 20040317; US 39075603 A 20030319