(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 2 979 848 A8**

(12) **CORRECTED EUROPEAN PATENT APPLICATION**

(15) Correction information:
Corrected version no 1 (W1 A1)
Corrections, see
Bibliography INID code(s) 72

(48) Corrigendum issued on:
16.03.2016 Bulletin 2016/11

(43) Date of publication:
03.02.2016 Bulletin 2016/05

(21) Application number: **15175566.7**

(22) Date of filing: **07.07.2015**

(51) Int Cl.:
B29C 65/50 *(2006.01)* *B29C 65/36* *(2006.01)*

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME
Designated Validation States:
MA

(30) Priority: **31.07.2014 DE 102014110908**

(71) Applicant: **Newfrey LLC**
Newark,
Delaware 19711 (US)

(72) Inventors:
- **SALTENBERGER, Reimar**
  35394 Giessen (DE)
- **STAU, Bastian**
  35394 Giessen (DE)
- **MICHEL, Ralf**
  35394 Giessen (DE)
- **BRUMM, Mathias**
  35394 Giessen (DE)

(74) Representative: **Witte, Weller & Partner**
Patentanwälte mbB
Postfach 10 54 62
70047 Stuttgart (DE)

(54) **THERMOPLASTIC JOINING SYSTEM AND METHOD**

(57) Composite component (40) that can be joined onto an area of a workpiece (28), with a base element (26) of a base material, the base element (26) having an area (44) for joining onto the workpiece area, a recess (42) in which a melting element (10) of a meltable plastics material is arranged being formed in the base area (44).

In this case, the melting element (10) protrudes axially with respect to the base area (44) in the non-melted state, so that the composite component (40) can be placed with the melting element (10) onto the workpiece area at the beginning of the joining process, the volume of the melting element (10) and the volume of the recess (42) being adapted to one another in such a way that the base area (44) can come closer to the workpiece area during the joining process, in order to limit an escape of molten material of the melting element (10) from the recess (42).

EP 2 979 848 A8

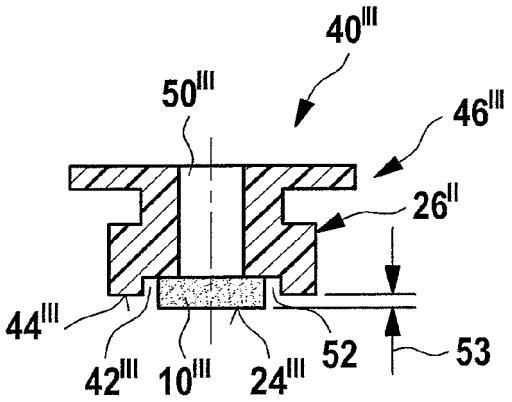
40III
50III
46III
26II
44III
42III
10III
24III
52
53

Fig. 5

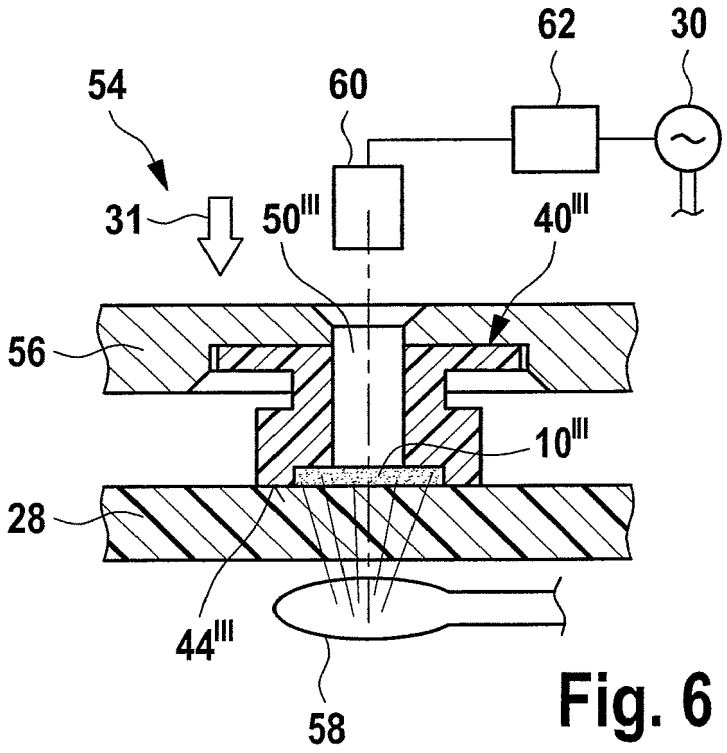
62
30
54
60
31
50III
40III
56
10III
28
44III
58

Fig. 6