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**Datasheet for the decision  
of 3 April 2023**

**Case Number:** T 0486/21 - 3.2.08

**Application Number:** 15801229.4

**Publication Number:** 3217918

**IPC:** A61C7/08

**Language of the proceedings:** EN

**Title of invention:**

ORTHODONTIC ALIGNER WITH ISOLATED SEGMENTS

**Applicant:**

Align Technology, Inc.

**Relevant legal provisions:**

EPC Art. 84

EPC R. 42

**Keyword:**

Description - adapted to claims (yes)



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Case Number: T 0486/21 - 3.2.08

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.08**  
**of 3 April 2023**

**Appellant:** Align Technology, Inc.  
(Applicant) 2820 Orchard Parkway  
San Jose, CA 95134 (US)

**Representative:** Hancox, Jonathan Christopher  
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**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 1 April 2021  
refusing European patent application No.  
15801229.4 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairwoman** P. Acton  
**Members:** C. Vetter  
Y. Podbielski

## **Summary of Facts and Submissions**

- I. The appeal was filed by the applicant (appellant) against the decision of the examining division to refuse the patent application in suit.
- II. The examining division decided, *inter alia*, that the first auxiliary request then on file did not meet the requirements of Article 84 EPC, because the description comprised subject-matter which was described as "embodiments of the invention" but was not covered by the claims.
- III. The appellant (applicant) requested that the decision under appeal be set aside and that a patent be granted based on the claims filed with the statement setting out the grounds of appeal dated 27 April 2021 and headed "First auxiliary request", together with amended description pages 1 to 9, 15 to 19 and 22 as filed with the appellant's letter of 30 March 2023, and description pages 10 to 14, 20 and 21 of the WO publication (WO 2016/075528 A1).
- IV. The appellant argued that the amended description fulfilled the requirements of the EPC.

## Reasons for the Decision

1. The independent claims of the main and only request, which was filed with the statement setting out the grounds of appeal dated 27 April 2021 and headed "First auxiliary request", read as follows.

### 1.1 Claim 1

A method comprising:  
generating a mold of a dental arch for a patient;  
thermoforming or pressure forming a plastic over the mold to form a plastic orthodontic aligner; and  
cutting the plastic orthodontic aligner to separate the plastic orthodontic aligner into a first segment (105) and a second segment (110) and to form a connector that connects the first segment to the second segment, wherein the first segment is for moving a first set of teeth of a patient; the first segment and the second segment being joined by the connector, wherein a reduced rigidity, greater flexibility, and/or geometric configuration of the plastic orthodontic aligner (100) at the connector (115) serves to isolate, reduce, or eliminate first force transmission between the first segment and the second segment and to prevent, when in use in a mouth of the patient, unintentional separation of the first segment and the second segment.

### 1.2 Claim 5

An orthodontic aligner comprising:  
a first plastic segment having a first shape that fits over a first portion of a dental arch of a patient, wherein the first plastic segment is configured to

apply a force to a first set of teeth in the first portion of the dental arch;  
a second plastic segment having a second shape that fits over a second portion of the dental arch of the patient; and  
a connector formed by removal of a portion of the orthodontic aligner between the first plastic segment and the second plastic segment, wherein a reduced rigidity, greater flexibility, and/or geometric configuration of the orthodontic aligner at the connector is adapted to isolate, reduce, or eliminate first force transmission between the first plastic segment and the second plastic segment and to prevent, when in use in a mouth of the patient, unintentional separation of the first plastic segment and the second plastic segment.

1.3 Claim 11

A non-transitory computer readable storage medium having instructions that, when executed to [sic] by a processing device, cause the processing device to perform operations comprising:  
receiving, by the processing device, a digital three-dimensional model of a dental arch of a patient;  
sending, by the processing device, first instructions to a rapid prototyping machine to cause the rapid prototyping machine to produce a physical mold of the dental arch based on the digital three-dimensional model;  
after the physical mold is formed, sending second instructions to a thermoforming or pressure forming machine to cause the thermoforming or pressure forming machine to create an orthodontic aligner based on thermoforming or pressure forming a plastic sheet to the physical mold; and

sending, by the processing device, third instructions to a cutting machine to cause the cutting machine to cut the orthodontic aligner into at least a first segment and a second segment, the second segment to apply a force to a first set of anterior teeth of the dental arch of the patient without applying any force to a second set of posterior teeth of the dental arch of the patient, wherein the third instructions cause a first portion of the orthodontic aligner between the first segment and the second segment to become a connector between the first segment and the second segment that isolates forces between the first segment and the second segment, wherein a reduced rigidity, greater flexibility, and/or geometric configuration of the orthodontic aligner at the connector serves to isolate, reduce, or eliminate force transmission between the first segment and the second segment and to prevent, when in use in a mouth of the patient, unintentional separation of the first segment and the second segment.

2. The amended description is composed as follows.
  - pages 1-9 filed with letter of 30 March 2023
  - pages 10-14 of the WO publication
  - pages 15-19 filed with letter of 30 March 2023
  - pages 20, 21 of the WO publication
  - page 22 filed with letter of 30 March 2023
3. The amended description fulfils the requirements of the EPC, in particular of Article 84 and Rule 42 EPC, with respect to the above claims.
4. The application is remitted to the examining division for examination in order to determine whether the above claims fulfil the patentability requirements and formal

requirements of the EPC, in particular of Articles 54, 56, 84 and 123(2) EPC.

## Order

### **For these reasons it is decided that:**

The decision under appeal is set aside. The case is remitted to the examining division for further prosecution.

The Registrar:

The Chairwoman:



C. Moser

P. Acton

Decision electronically authenticated