

## Title (en)

HIGH PERFORMANCE PHOTOCURABLE OPTICALLY CLEAR ADHESIVE

## Title (de)

HOCHLEISTUNGSFÄHIGER PHOTOHÄRTBARER OPTISCH KLARER KLEBSTOFF

## Title (fr)

ADHÉSIF OPTIQUEMENT TRANSPARENT, PHOTODURCISSABLE, TRÈS PERFORMANT

## Publication

**EP 3589710 A1 20200108 (EN)**

## Application

**EP 18712743 A 20180227**

## Priority

- US 201762466649 P 20170303
- US 2018019958 W 20180227

## Abstract (en)

[origin: WO2018160564A1] The present invention is an optically clear, curable adhesive including a polyvinylbutyral, a polyurethane (meth)acrylate, and a photoinitiator. The polyvinylbutyral has a dynamic viscosity of between about 9 and about 13 mPA•s and a polyvinyl alcohol weight percent of less than about 18%. The polyurethane (meth)acrylate includes the reaction product of a diol, at least one diisocyanate, and a hydroxyfunctional (meth)acrylate or an isocyanatofunctional (meth)acrylate. When the optically clear, curable adhesive is placed between two transparent substrates and made into a laminate, the laminate has a haze of less than about 6%, a transmission of greater than about 88% and an optical clarity of greater than about 98% when cured. The optically clear, curable adhesive also has a peel adhesion of at least about 100 g/cm based on ASTM 3330 when cured.

## IPC 8 full level

**C09J 4/06** (2006.01); **B32B 27/32** (2006.01)

## CPC (source: EP US)

**B32B 7/12** (2013.01 - EP US); **B32B 17/10** (2013.01 - EP US); **B32B 17/10706** (2013.01 - EP US); **B32B 17/10761** (2013.01 - EP US); **B32B 17/1077** (2013.01 - EP US); **B32B 23/04** (2013.01 - EP); **B32B 23/06** (2013.01 - EP); **B32B 23/08** (2013.01 - EP); **B32B 23/20** (2013.01 - EP); **B32B 27/06** (2013.01 - EP); **B32B 27/08** (2013.01 - EP); **B32B 27/10** (2013.01 - EP); **B32B 27/306** (2013.01 - EP); **B32B 27/308** (2013.01 - EP); **B32B 27/32** (2013.01 - EP); **B32B 27/36** (2013.01 - EP); **B32B 27/365** (2013.01 - EP); **B32B 27/40** (2013.01 - EP); **B32B 29/002** (2013.01 - EP); **C08F 261/12** (2013.01 - EP); **C08F 299/065** (2013.01 - EP); **C08G 18/10** (2013.01 - EP); **C08G 18/246** (2013.01 - EP); **C08G 18/4277** (2013.01 - EP); **C08G 18/4808** (2013.01 - EP); **C08G 18/4825** (2013.01 - EP); **C08G 18/4854** (2013.01 - EP); **C08G 18/722** (2013.01 - EP); **C08G 18/73** (2013.01 - EP); **C08G 18/755** (2013.01 - EP); **C08G 18/757** (2013.01 - EP); **C08G 18/758** (2013.01 - EP); **C08G 18/8116** (2013.01 - EP); **C09J 4/06** (2013.01 - EP US); **C09J 129/14** (2013.01 - US); **C09J 175/14** (2013.01 - US); **B32B 2250/02** (2013.01 - EP); **B32B 2255/10** (2013.01 - EP); **B32B 2255/26** (2013.01 - EP US); **B32B 2307/412** (2013.01 - EP US); **B32B 2307/748** (2013.01 - EP); **B32B 2419/00** (2013.01 - EP); **B32B 2451/00** (2013.01 - EP); **B32B 2457/20** (2013.01 - EP); **B32B 2457/202** (2013.01 - EP); **B32B 2457/206** (2013.01 - EP); **B32B 2457/208** (2013.01 - EP); **B32B 2551/00** (2013.01 - EP); **B32B 2605/00** (2013.01 - EP); **B32B 2605/006** (2013.01 - EP); **C09J 2301/416** (2020.08 - US)

## Citation (search report)

See references of WO 2018160564A1

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