

Title (en)  
METHOD AND APPARATUS FOR FLATPROOFING A TIRE AND WHEEL ASSEMBLY AND RESULTING FLATPROOFED ASSEMBLY

Title (de)  
VERFAHREN UND VORRICHTUNG ZUR IMPLEMENTIERUNG DER PANNENSICHERHEIT EINER REIFEN- UND RADANORDNUNG UND SICH ERGEBENDE PANNENSICHERE ANORDNUNG

Title (fr)  
PROCEDE ET APPAREIL DESTINES A GARANTIR LA RESISTANCE AU DEGONFLEMENT D'UN ENSEMBLE PNEU ET ROUE ET ENSEMBLE RESISTANT AU DEGONFLEMENT

Publication  
**EP 1648679 A4 20100602 (EN)**

Application  
**EP 04777734 A 20040709**

Priority

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- US 68693603 A 20031016

Abstract (en)  
[origin: WO2005007379A1] A method and apparatus are disclosed for flatproofing a tire and wheel assembly (208) with a flexible, lightweight foam-fill by supplying at least two polyurethane reactive materials to a static mixer (116). The static mixer mixes the reactants, and a nucleating gas is supplied to the mixed reactants in the static mixer to form a liquid reactant mixture with entrained gas. The reactant mixture is injected into the tire and wheel assembly where the mixture reacts and foams replacing the air in the tire with a flexible, lightweight semi-open cell foam-fill. The resulting foam-filled tire and wheel assembly is then allowed to cure.

IPC 8 full level  
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CPC (source: EP)  
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Citation (search report)

- [XY] DE 19837690 A1 20000224 - KISCHEK RALF [DE]
- [X] US 3769232 A 19731030 - HOULDRIDGE T
- [X] US 5893486 A 19990413 - WASMIRE FREDERICK D [US]
- [Y] DE 20010172 U1 20010419 - FREHNER REINHOLD [DE]
- [Y] US 6293762 B1 20010925 - FARKHAN HORMOZ [US]
- [Y] US 4071386 A 19780131 - GOMBERG EDWARD N
- [A] DE 2835739 A1 19800228 - PORSCHE AG
- See references of WO 2005007379A1

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