

Title (en)

A VIBRATION ISOLATOR ASSEMBLY HAVING ALTERED STRESS CHARACTERISTICS AND METHOD OF ALTERING STRESS CHARACTERISTICS OF SAME

Title (de)

SCHWINGUNGSENTKOPPLERANORDNUNG MIT VERÄNDERTEN BELASTUNGSSCHARAKTERISTIKEN UND VERFAHREN ZUR ÄNDERUNG IHRER BELASTUNGSSCHARAKTERISTIKEN

Title (fr)

ENSEMBLE D'ISOLATION DE VIBRATIONS PRESENTANT DES CARACTERISTIQUES DE CONTRAINTES MODIFIEES ET PROCEDE DE MODIFICATION DE CARACTERISTIQUES DE CONTRAINTES D'UN TEL ENSEMBLE

Publication

**EP 1631753 A4 20070530 (EN)**

Application

**EP 04754966 A 20040610**

Priority

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- US 82857404 A 20040421

Abstract (en)

[origin: WO2005001305A2] A vibration isolator assembly, such as an isolator bushing or cradle mount, includes a housing and an isolator connected to the housing. A shaft assembly includes first and second mating components, the first component being connected to the elastomer and having a cavity of a first dimension for receiving the second component having a different, second dimension therein. The differing dimensions alter the stress characteristics of the vibration isolator assembly. In the preferred arrangement, the shaft assembly includes a first component comprising first and second portions, a thin layer of elastomer interposed between the first and second components and a second component which is inserted between the portions to relieve tensile stress in the isolator and, if desired, to impart a compressive stress in the isolator. The thin layer of elastomer permits the first components to be made more economically. The first component of the shaft assembly is made at a lower dimensional tolerance and subsequently produced to a higher dimensional tolerance by molding the thin layer of elastomer to a precision tolerance.

IPC 8 full level

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CPC (source: EP KR)

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Citation (search report)

- [X] EP 0499996 A1 19920826 - BRIDGESTONE CORP [JP]
- [X] FR 2333163 A1 19770624 - KLEBER COLOMBES [FR]
- [X] FR 2739153 A1 19970328 - PEUGEOT [FR]
- [X] US 5024425 A 19910618 - SCHWERDT HANS-WERNER [DE]
- [X] JP H02113137 A 19900425 - BRIDGESTONE CORP
- [X] US 3881711 A 19750506 - LEMAITRE JEAN-CLAUDE
- [X] GB 2010438 A 19790627 - METZELER KAUTSCHUK
- See references of WO 2005001305A2

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DOCDB simple family (application)

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