



US008029820B2

(12) **United States Patent**  
**Shirai et al.**

(10) **Patent No.:** **US 8,029,820 B2**  
(45) **Date of Patent:** **Oct. 4, 2011**

(54) **PATCHES CONTAINING TULOButEROL**

(56) **References Cited**

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**Kenichi Hattori**, Tokushima (JP);  
**Takako Sueda**, Aki-gun (JP)

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(21) Appl. No.: **10/524,858**

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(22) PCT Filed: **Jun. 16, 2004**

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(86) PCT No.: **PCT/JP2004/008777**

§ 371 (c)(1),  
(2), (4) Date: **Feb. 18, 2005**

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(87) PCT Pub. No.: **WO2004/112770**

PCT Pub. Date: **Dec. 29, 2004**

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(65) **Prior Publication Data**

US 2005/0220852 A1 Oct. 6, 2005

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(30) **Foreign Application Priority Data**

Jun. 20, 2003 (JP) ..... 2003-176799

(57) **ABSTRACT**

(51) **Int. Cl.**  
**A61F 13/02** (2006.01)

A patch containing tulobuterol in the low concentration and having the stable release-controllability, prepared by laminating an adhesive layer consisting of a rubber, an adhesive resin and a plasticizer on a backing, wherein 1 to 4 w/w % of tulobuterol in the lower concentration as an active ingredient and 0.1 to 3 w/w % of a higher fatty acid as a drug-releasing controlling agent are contained in the adhesive layer.

(52) **U.S. Cl.** ..... **424/448; 424/449**

(58) **Field of Classification Search** ..... None  
See application file for complete search history.

**4 Claims, 4 Drawing Sheets**

Noven Pharmaceuticals, Inc.

FIG 1

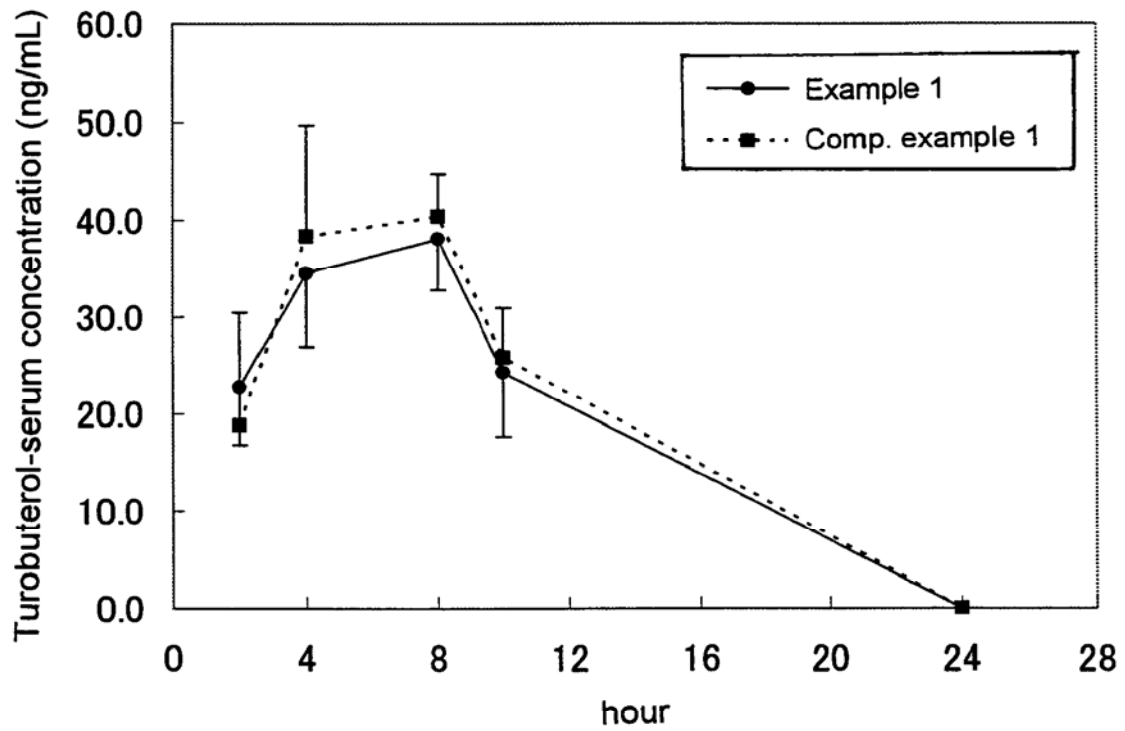


FIG 2

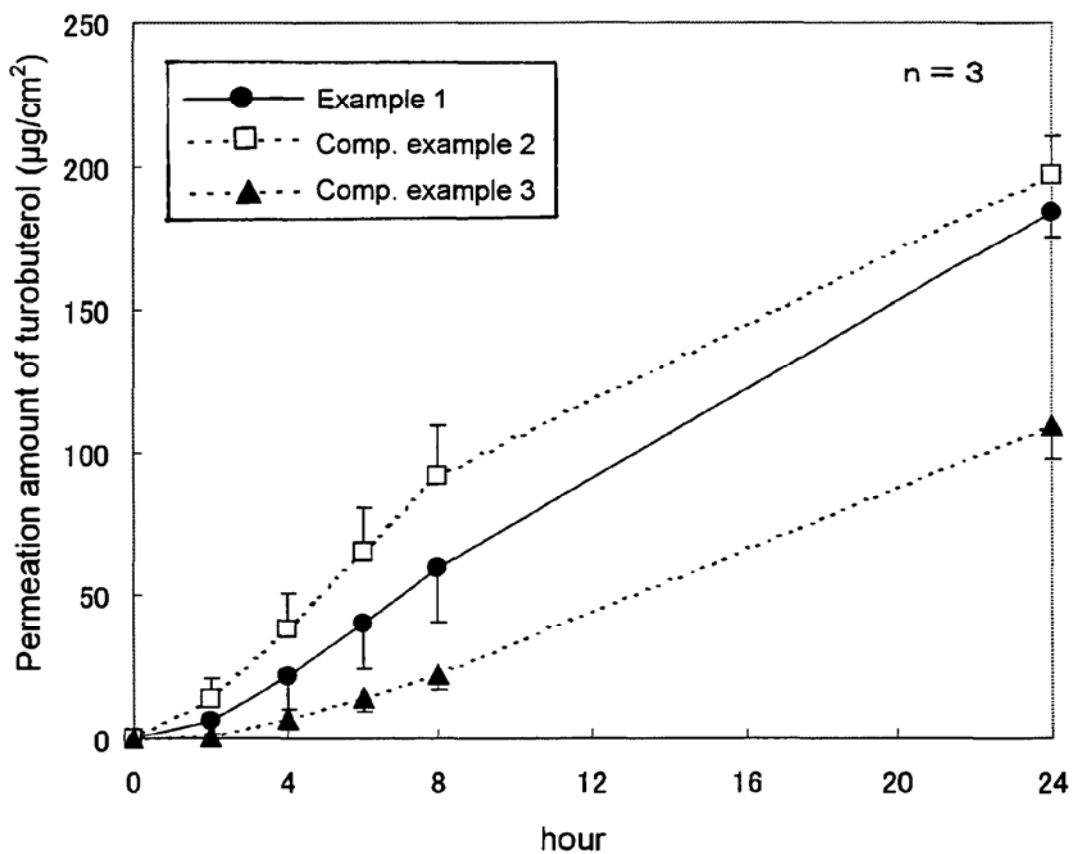


FIG 3

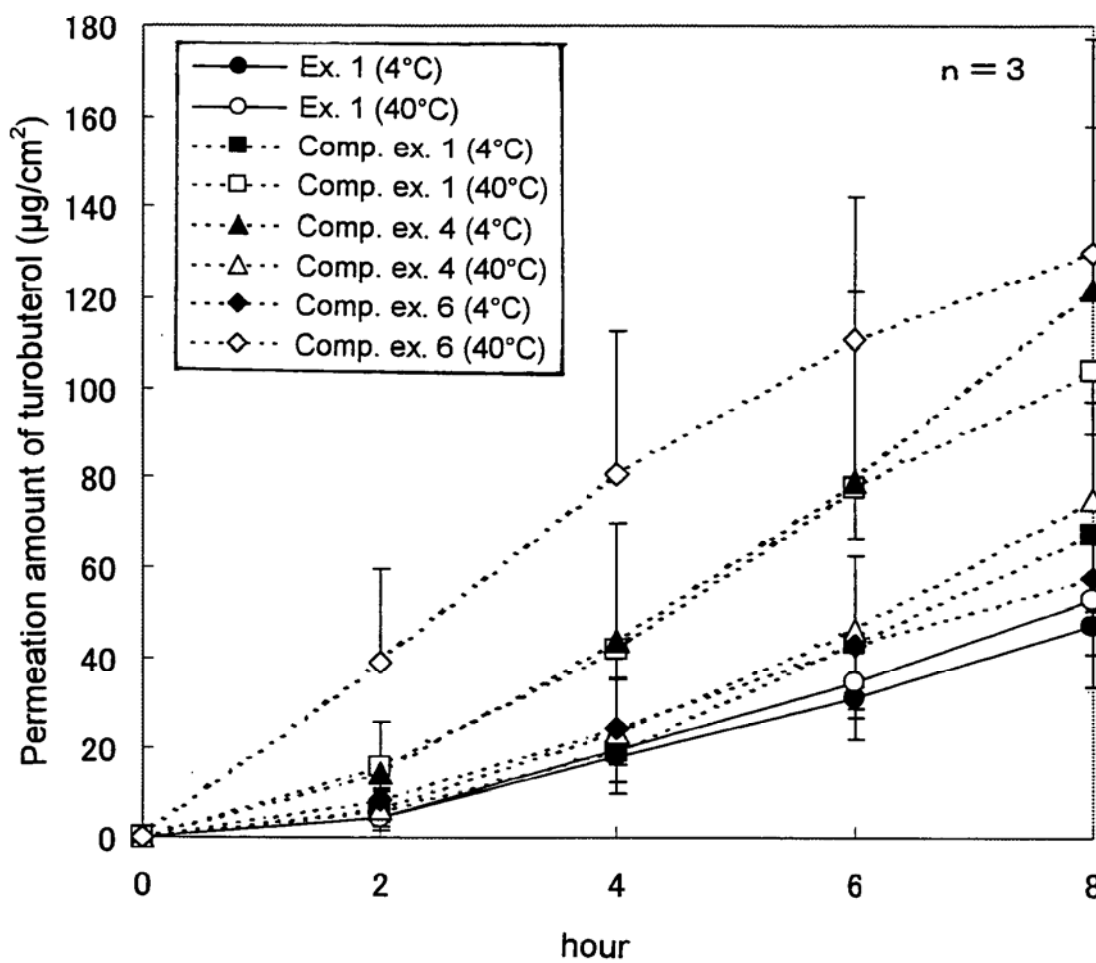
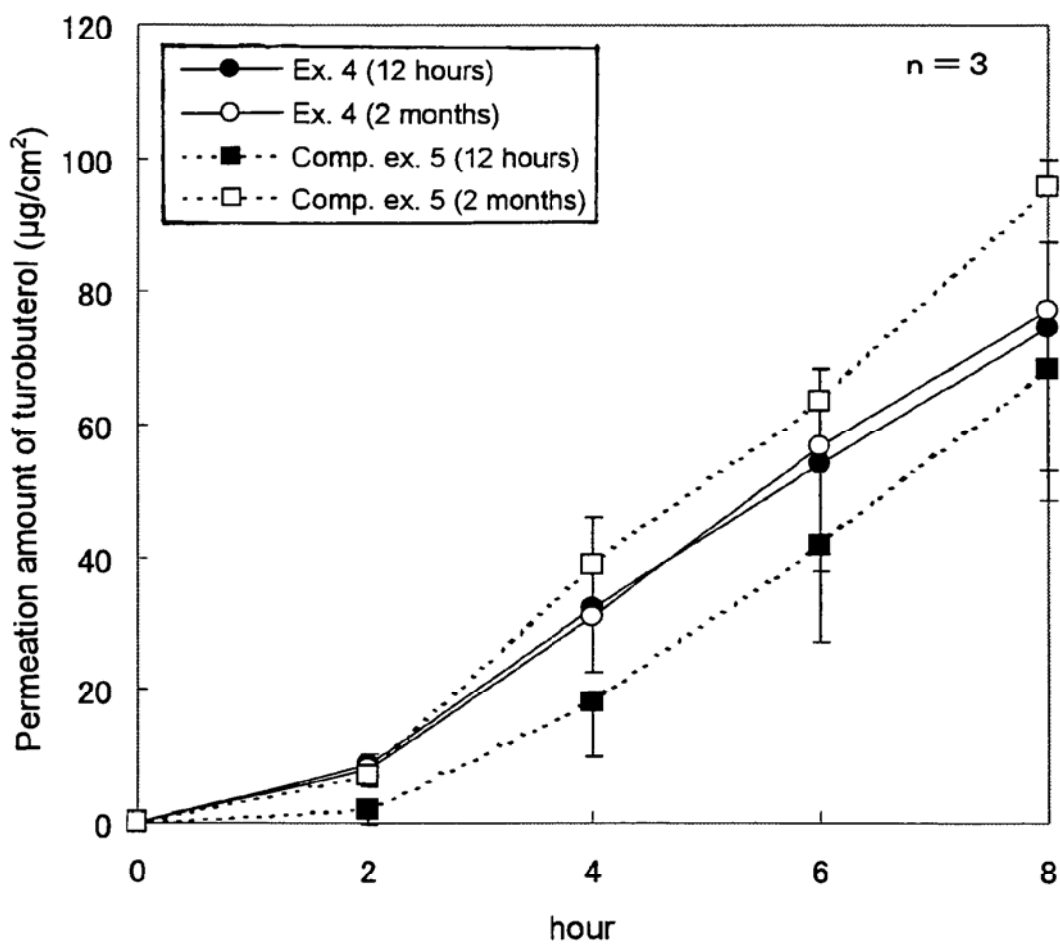


FIG 4



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