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PN - [CN213992650U](#) U 20210820
PR - CN202023247485U 20201228
AP - CN202023247485U 20201228
DT - I
PA - GUANGDONGZHANCHENG YANCHUANGTECH CO LTD
TI - Shoe outsole structure for sports shoes
AB - The utility model discloses a shoe outsole structure for sports shoes, which relates to the field of shoe outsoles for sports shoes, and comprises a sole main body, the top of the sole main body is connected with a shoe **midsole**, one side of the shoe **midsole** is provided with a shock absorption cavity, one side of the inside of the shock absorption cavity is connected with a partition plate, and the top and the bottom of the partition plate are respectively provided with a limiting plate. The supporting plate moves downwards to drive the two limiting shafts to move downwards, when the limiting shafts move downwards, the limiting shafts are inserted into the damping grooves, due to the fact that the **diameter** of the springs is larger than that of the damping grooves, and the **diameter** of the limiting shafts is smaller than that of the damping grooves, the springs are prevented from entering the damping grooves, and therefore damping is conducted on the **foot** sole; when the heel is in contact with the ground, the heel of a user extrudes the damping cavity, the elastic ball shrinks under pressure, the user resets when lifting the **foot**, the **impact** force of the ground to the human body is scattered, and the problem that the user walks difficultly due to the fact that the sole is hard is solved.

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PN - [KR20090061998](#) A 20090617
PR - KR20070129059 20071212
AP - KR20070129059 20071212
DT - I
CI - A43B7/06 (KR)
- A43B13/183 (KR)
- A43B13/20 (KR)
PA - KIM JONG KIL [KR]; KIM KWANG SOOK [KR]
TI - SHOE SOLE HAVING EXCELLENT VENTILATION AND CUSHION
AB - A sole is provided to improve air ventilation and cushioning property for absorbing the **impact** transferred from the ground and to inhibit the **foot** smell even in case of the wearing for a long time. A sole comprises an outsole(1); a **midsole**(2) laminated inside the outsole; and an insole(3) laminated at the upper part of the **midsole**. A plurality of air ventilation holes(4) are formed at the front surface of the insole. A buffer spring(7) whose **diameter** increases from the upper part to the lower part is vertically installed at the front, middle and back shafts of the space part(6) formed between the **midsole** and the insole by the installation groove(8) formed at the upper surface of the **midsole** and at the lower surface of the insole.

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PN - [KR20090019655](#) A 20090225

PNFP - KR100937229B B1 20100115

PR - KR20070114530 20071109

AP - KR20070114530 20071109

DT - I

CI - A43B7/32 (KR)
 - A43B13/183 (KR)
 - A43B13/206 (KR)
 - A43B21/30 (KR)

PA - (A)
 LEE SANG PIL [KR]

TI - (A)
 SHOES HAVING SHOCK ABSORBING FUNCTION
 - (B1)
 Shoes having shock absorbing function

AB - (A)
 Footwear having a shock-absorbing function is provided, which reduces the fatigue of the **foot** when walking or running and to sweep away the bacteria generation. Footwear having a shock-absorbing function comprises: an insole(3) in which the upper of leather is combined and a plurality of ventilation holes are formed; a **midsole**(4) combined with the bottom of the insole; a bottom sole(5) combined with the bottom of the **midsole**; a groove(4a) formed in the top front of the **midsole**; a spring insertion hole (4b); a coil spring(6) which is mounted while the bottom being inserted and of which **diameter** gets smaller to the top; a cover plate(7) in which a fixing groove(7a) is formed to the bottom; an air channel(12) formed long at the floor of the groove in the traverse direction; and an **impact** absorbing pad(10).

PN - [JPH0723804](#) A 19950127

PR - JP19930195277 19930713

AP - JP19930195277 19930713

DT - I

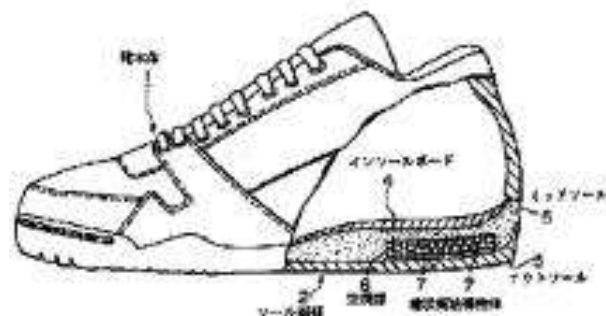
FI - A43B13/42; A43B5/00

FT - 4F050/AA01; 4F050/BA01;
4F050/BA02; 4F050/BA36;
4F050/BA38; 4F050/BA43;
4F050/BA49; 4F050/BA50;
4F050/HA53; 4F050/HA55;
4F050/HA56; 4F050/HA83;
4F050/JA01

PA - YAMAHA CORP

TI - SPORTS SHOES

AB - PURPOSE:To improve durability and **impact** absorption performance by packing plural pieces of spherical highly viscoelastic materials into the cavity formed in a **midsole** part existing between the outsole and insole board part constituting the heel of a shoe body.
CONSTITUTION:The heel part of the sole surface part 2 of the shoe body 1 is composed of the insole board 4, the **midsole** 5 and the outsole 3. The cavity part 6 is formed in the part corresponding to the lower side of the heel of the **foot** near the rear of the **midsole** 5. The plural spherical highly viscoelastic materials 7 which consist of a urethane gel, silicon gel, polystyrenic elastomer, etc., and having 5 to 7mm **diameter** are disposed at 2 to 4 pieces in the thickness direction. The spherical highly viscoelastic materials 7 are arranged by housing these materials into a bag-shaped film having air permeability. The depth of the cavity part 6 is confined $\leq 1/2$ the thickness of the **midsole** 5. As a result, the durability is



improved, the weight is reduced
and the **impact** absorption is
improved.