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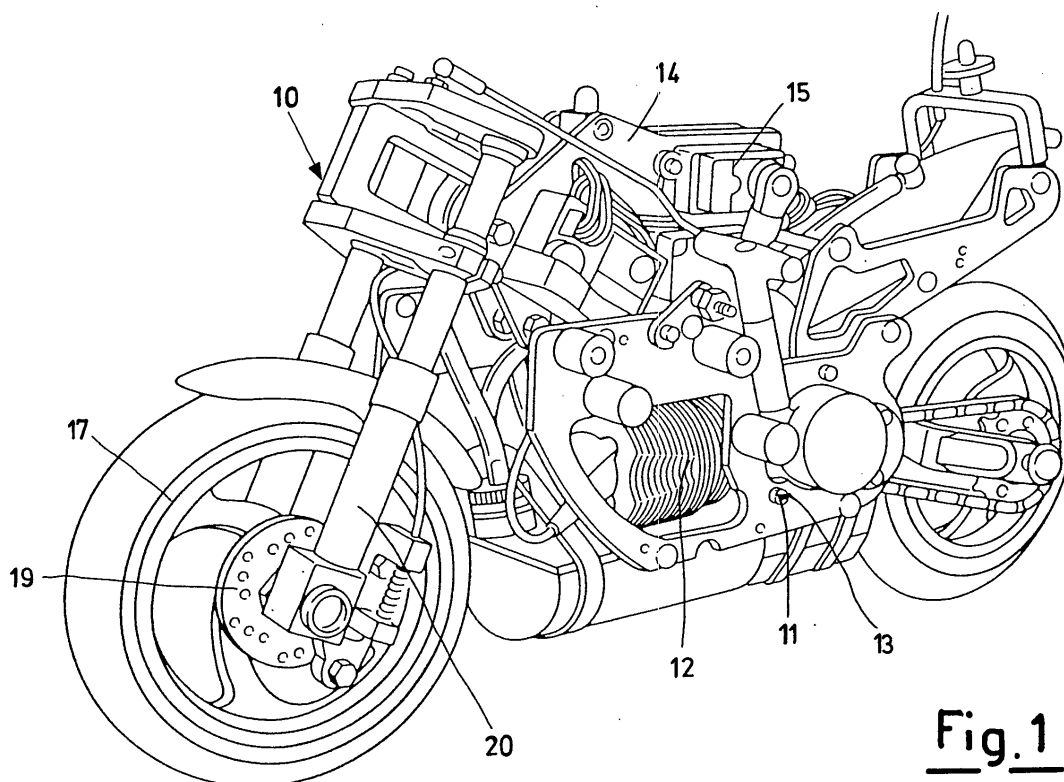
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(54) **Motorcycle model driven by an internal combustion engine with a rewind starter**

(57) Motorcycle model driven by an internal combustion engine with a rewind starter comprising a chassis (10) suitable for carrying the internal combustion engine (12) to which it is fixed by means of screws (13) directly onto the rear crankcase, a plate (14) suitable for

holding the servo controls (15) of the leverages for the front brake, rear brake, for the carburetor and steering gear lever, a front wheel (17) with a housing for the braking system and a back wheel suitable for receiving the pad braking system and a steering gear for maneuvering the motorcycle (20).



**Fig.1**

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## Description

[0001] The present invention relates to a motorcycle model driven by an internal combustion engine with a rewind starter.

[0002] Motorcycle models with an electric starter, are known. The disadvantages of this type of model are due to the limited running autonomy, the reduced speed and stability of the model when running.

[0003] The objective of the present invention is to overcome the above drawbacks by transformation from a motorcycle with electric engine transmission to a motorcycle with an internal combustion engine.

[0004] The technical problem to be solved is to produce an engine mounting which resists vibrations, special rims with entrainment for the disc brakes, a brake pad holder and an upper shoulder which holds the double servo control.

[0005] The solution to the technical problem is characterized in that it comprises a chassis suitable for carrying the internal combustion engine to which it is fixed, by means of screws directly to the rear crankcase, a plate suitable for holding the servo controls of the leverages for the front brake, the rear brake, the carburetor and steering gear lever, a front wheel with a housing for the braking system and a back wheel suitable for receiving the pad braking system and a steering gear for maneuvering the motorcycle.

[0006] Further characteristics and advantages will appear evident from the following description and enclosed drawings in which:

Figure 1 shows a perspective view of the motorcycle model object of the present invention

Figure 2 shows the engine mounting chassis in detail

Figure 3 shows a detail of the chassis of figure 1

Figure 4 shows the front wheel in figure 1 in detail.

[0007] With reference to figure 1, a chassis is generically indicated with 10, equipped with a shoulder 11 (figure 1 and 2) for the fixing and regulation of the internal combustion engine 12 with a rewind starter for ignition. The fixing is obtained by means of screws 13 directly on the rear crankcase of the engine or with the help of a pin or plate to stiffen the fixing. A plate 14 (figure 1 and 3) is equipped with housings 21 and 22 suitable for holding the two servo controls 15 of the leverages for the front and rear brake, the leverage for the carburetor and steering-gear lever.

[0008] This position of the servo controls 15 serves for the rapid substitution of the servo controls in the case of a breakdown. The whole system moves the barycentre in an optimal position for allowing an ideal stability of the motorcycle in straight roads and bends, by compensating downwards the excessive weight of the fuel tank and engine.

[0009] Holes 16 for fixing the engine 12, are situated

on the shoulder 11, the distance of the axes of said holes being 30.0000 mm.

[0010] The front rim 17 (figure 1 and 4) is obtained with a hexagon 18 suitable for the entrainment of the disc brake 19.

[0011] The brake pad holder unit with a brake cam forms the braking system of the motorcycle and consists of brake pads made of a braking material between which the disc brake rotates and, by means of a cam driven by a leverage coming from the servo control, brakes the motorcycle at the front.

[0012] The advantage of this mounting is the fixing system as no screws are used but it is only fixed on the fork 20. This brake facilitates the assembly and dismantling of the front wheel for its substitution.

[0013] The rear brake is of the drum type and is made up of a ring fixed onto the main shaft of the motorcycle, inside the partition on which a lever acts with a pad made of a braking material. This lever is hinged in the lower part of the pin which holds the tank.

## Claims

1. A motorcycle model driven by an internal combustion engine with a rewind starter, comprising a chassis suitable for carrying the internal combustion engine to which it is fixed, by means of screws directly onto the rear crankcase, a plate suitable for holding the servo controls of the leverages for the front brake, rear brake, carburetor and steering gear lever, a front wheel with a housing for the braking system and a back wheel suitable for receiving the pad braking system and a steering gear for maneuvering the motorcycle.
2. The motorcycle model driven by an internal combustion engine with a rewind starter according to claim 1, **characterized in that** said front wheel has a hexagon suitable for receiving a front disc brake.
3. The motorcycle model driven by an internal combustion engine with a rewind starter according to claim 1 and 2, **characterized in that** the fixing of said brake to said front wheel allows the rapid assembly and dismantling of said wheel.
4. The motorcycle model driven by an internal combustion engine with a rewind starter according to claim 1, **characterized in that** the distance of the axes of said fixing screws of said internal combustion engine is 30.0000 mm.
5. The motorcycle model driven by an internal combustion engine with a rewind starter according to claim 1, **characterized in that** said plate has housings suitable for supporting the two servo controls of the leverages for the front brake and back brake,

a leverage for the carburetor and for the steering gear, said plate allowing the rapid substitution of said servo controls.

6. The motorcycle model driven by an internal combustion engine with a rewind starter according to what is described above and illustrated in the enclosed drawings.

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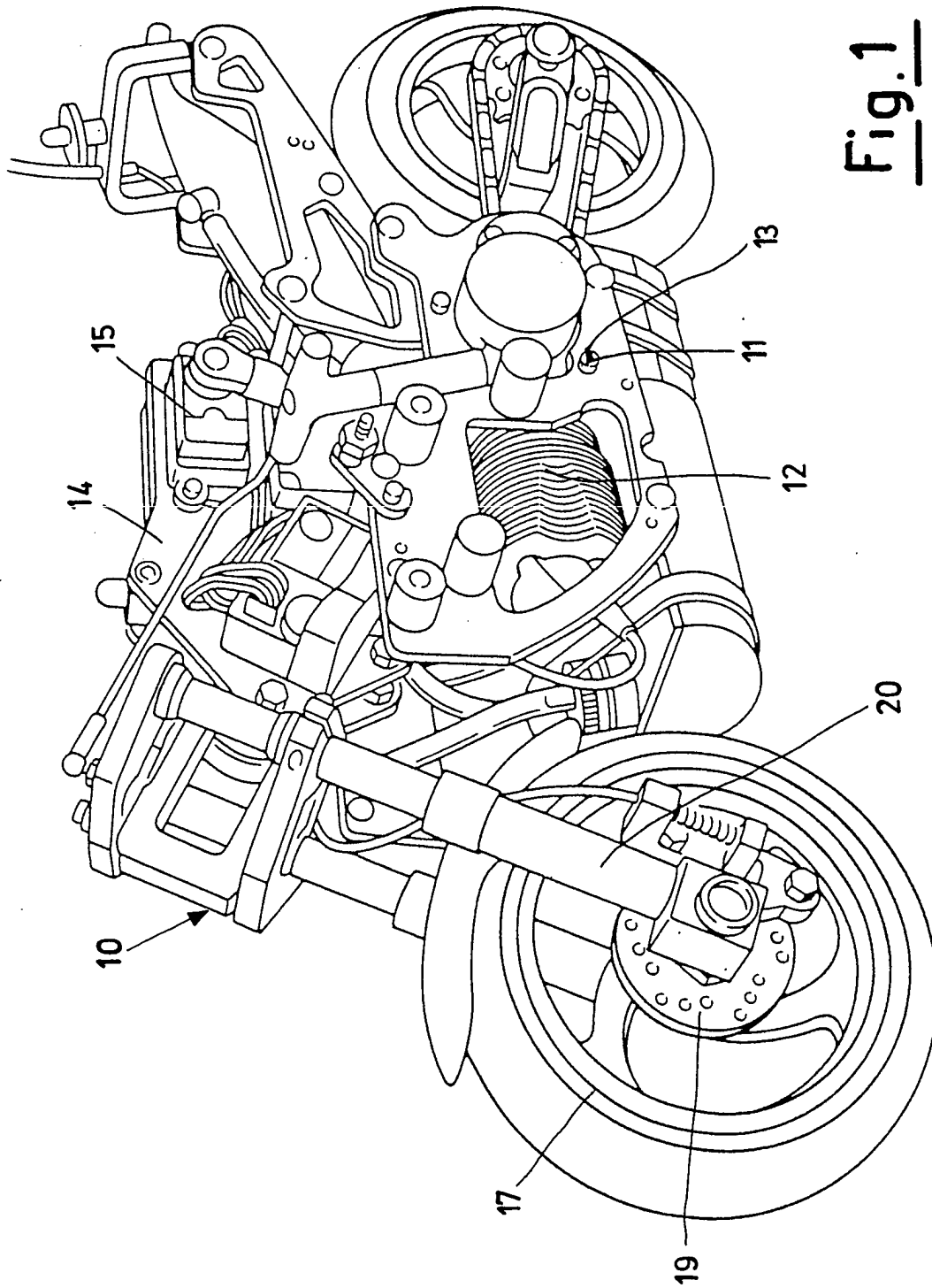


Fig. 1

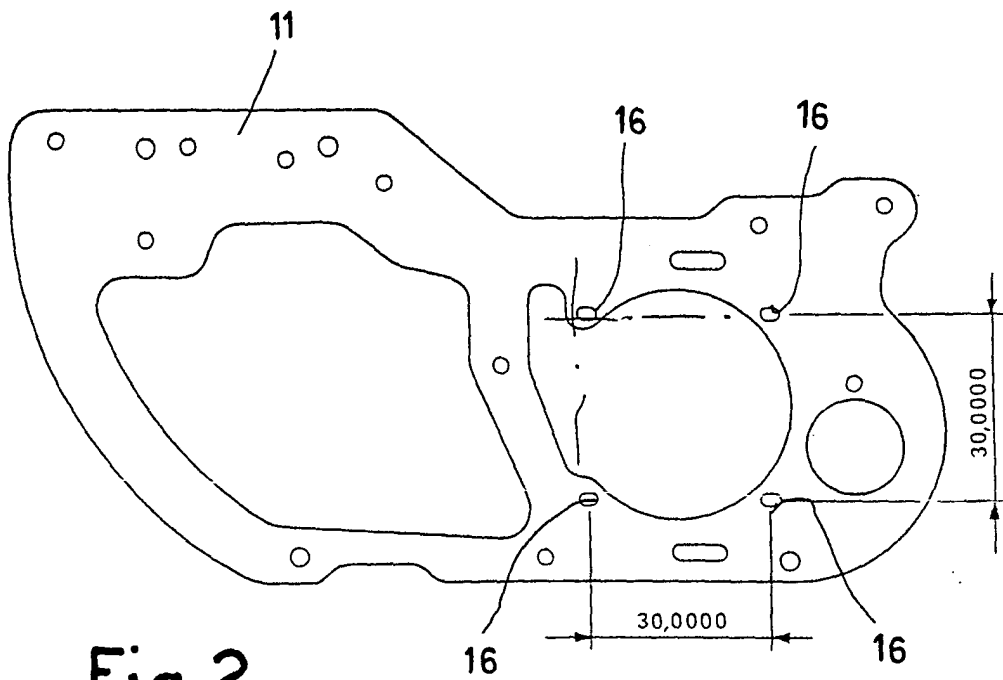


Fig. 2

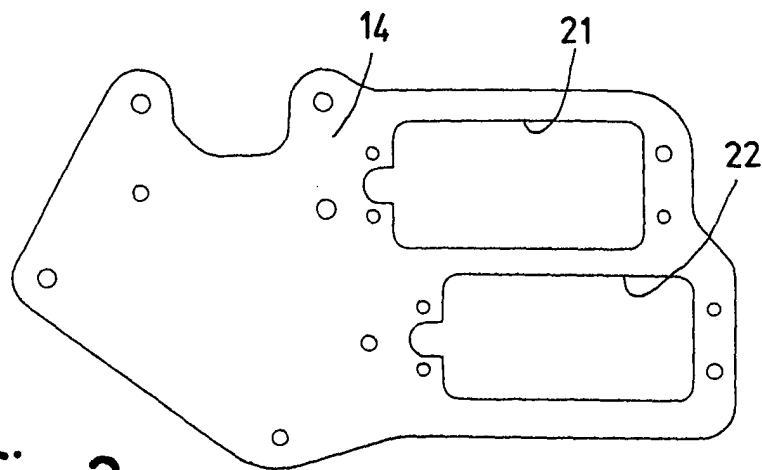


Fig. 3

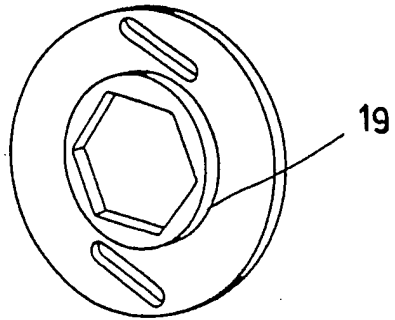
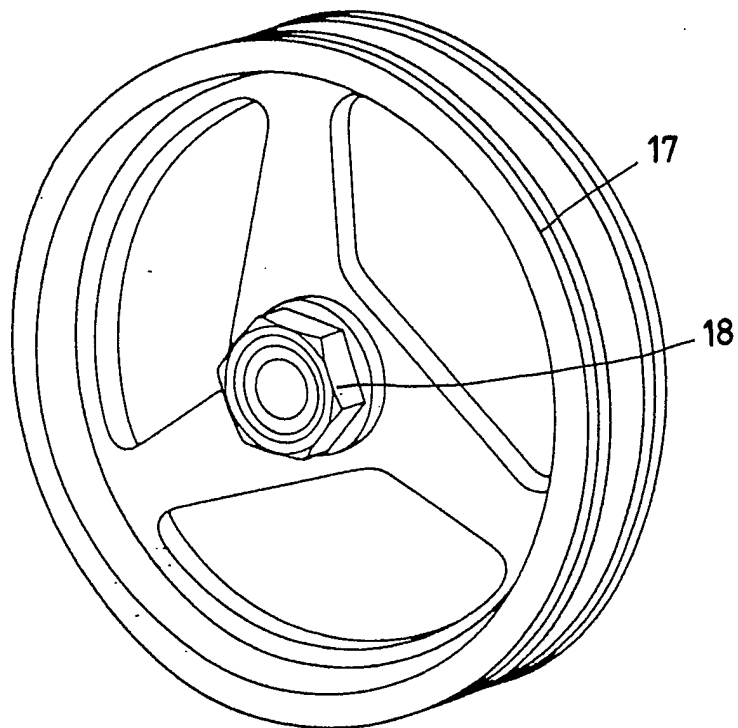


Fig.4





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# EUROPEAN SEARCH REPORT

Application Number  
EP 04 07 5138

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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
MUNICH		1 July 2004	Turmo Peruga, R
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EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
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