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— *of inventorship (Rule 4.17(iv)) for US only*

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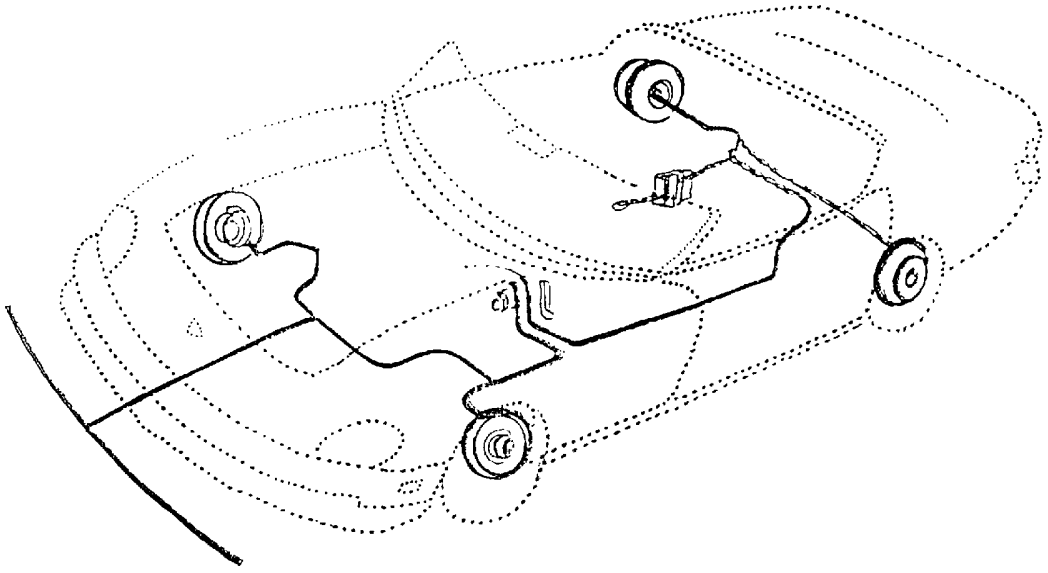
(54) Title: VEHICLE PROTECTION SYSTEMS



(57) Abstract: A method for stopping a moving vehicle through brakes to be installed in the front side of a vehicle. The brakes bring independently and automatically the vehicle to stop, in the event of being pressed by any object, irrespective of whether the person driving the vehicle applies the brakes or not.

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PARVATI VEHICLE PROTECTION SYSTEMS

INTRODUCTION

We have described the system whereby there is provision for involuntary deceleration on moving vehicles. This can be done in all mechanized and non-mechanised (manual) vehicles.

So far the prerogative of applying the brakes, deceleration of vehicles and bringing them to a stop was a voluntary process solely at the command and disposal of the person driving the vehicle.

By way of this system, an additional system of slowing down and also stopping the vehicles has been developed. This system is not dependant on the person driving the vehicle.

INSTALLATION OF BRAKES AT THE FRONT AND THE CONNECTION OF SUCH INSTALLATIONS WITH POWER SYSTEMS OF THE VEHICLE.

As on date almost all vehicles, except those used for training, have only one brake. Obviously the person who drives the vehicle has complete, unilateral and singular command over this brake.

By way of this application, we propose the multi-brake model for the following purposes : -

1. Increased safety of passengers traveling in all vehicles.
2. Minimization of damage to all the vehicle in the event of a collision.
3. Control of damage to the other parties, including pedestrians.
4. Totally eliminating the human error factors involved in accidents.
5. Preventing vehicles from causing extensive damage in cases of mechanical failures etc.

This will be done in the following manner : -

1. An involuntary braking system (with or without an accompanying clutch system and other required accessories) will be installed at the front side and/or the sides adjoining the front part of the vehicle. Among other places such installation will be at the front bumper which may be extended on to the sides of the vehicle. Other arrangements can include installation at any place on the front. Alternatively, the front bumper or any similar structure can be made to protrude out to a variable distance from the body of the vehicle on the front side.

2. This involuntary braking system is to be connected to the main braking system of the vehicle. As and when this structure containing this braking system is either touched and/or pressed by a third party, i.e. an outside party, this braking system will start working like the main brake of the vehicle and the vehicle will come to a halt.

3. This will happen without the control of the person driving the vehicle. In case of frontal collision with anything, including another vehicle, any living or non-living object, or even with a pedestrian, the vehicle will automatically come to a halt, irrespective of whether the driver has applied the brakes or not.

4. Such braking system can also derive power from the electrical and/or mechanical power of the vehicle. Hence, the speed of the vehicle will not affect the application of these involuntary brakes.

These systems are aimed at preventing deaths and damage. There is no doubt that these systems will be very effective and will be in regular use in the very near future.

This system will herald a new era in the field of transportation in the world. Such an idea has never been conceived in the past. Besides being new and novel, it is cost effective. It will go a long way in reducing human suffering, preventing a very large number of deaths and saving damage to various things, including vehicles.

CLAIMS

What is claimed is :

1. A method for stopping a moving vehicle through brakes to be installed in the front side of a vehicle, said brakes independently and automatically causing the vehicle to stop, in the event of being pressed by any object, irrespective of whether the person driving the vehicle applies them or not.

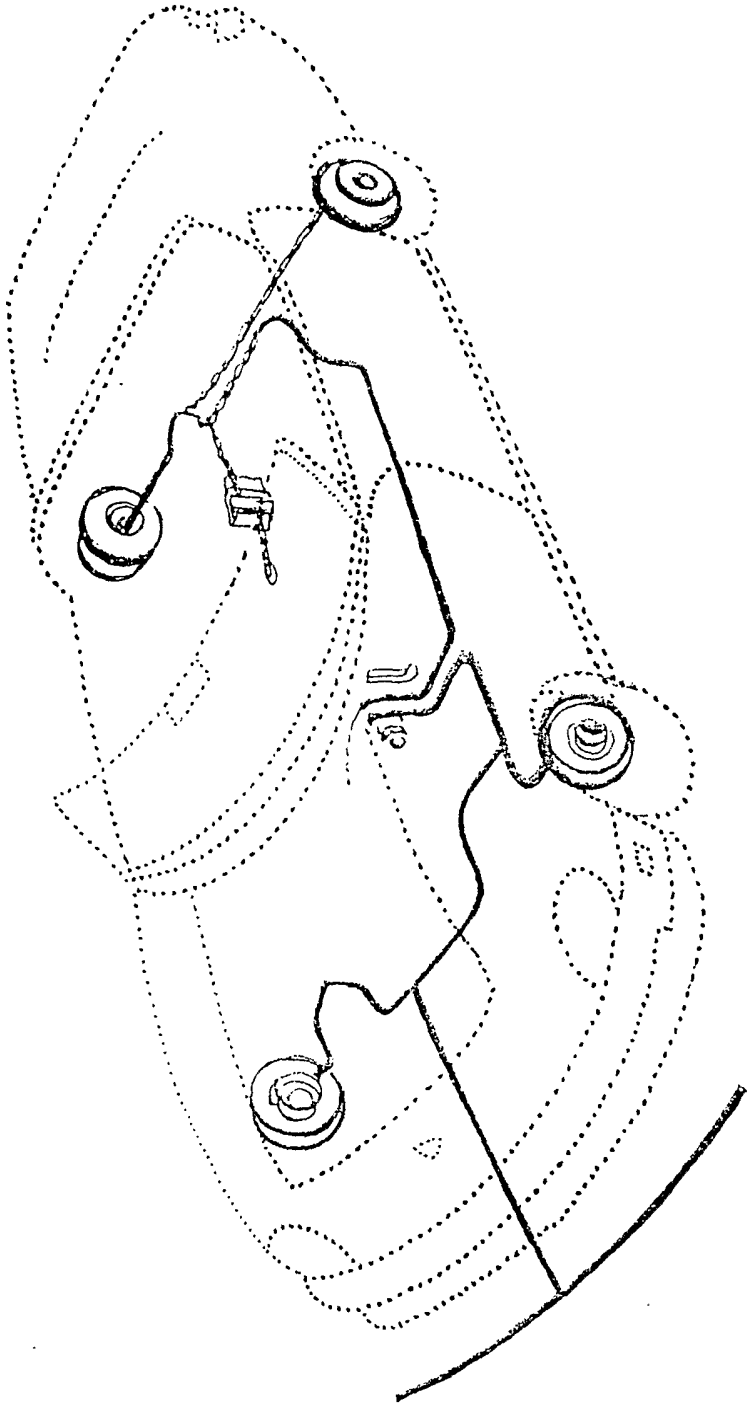

Fig. 1

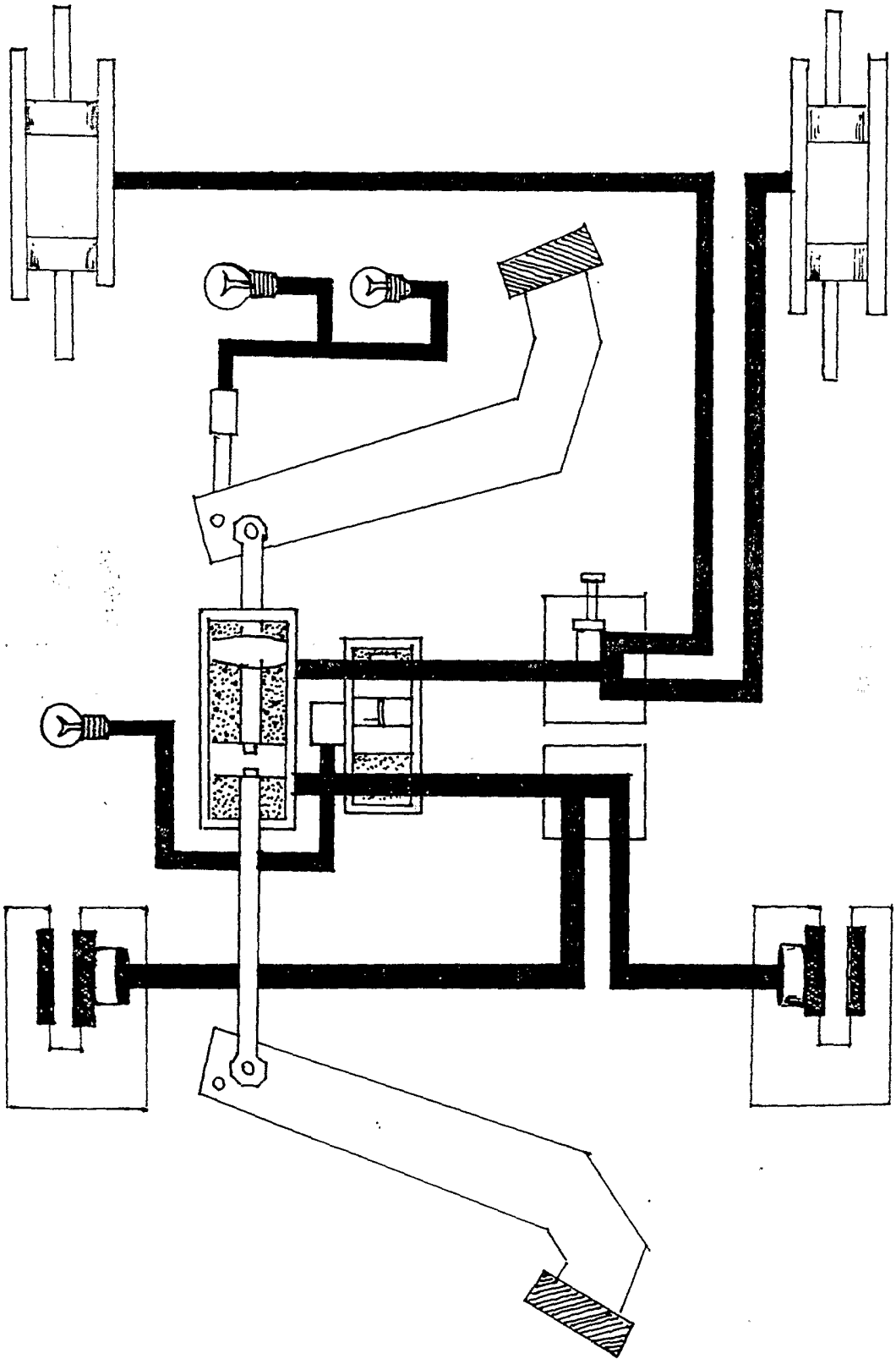

Fig. 2

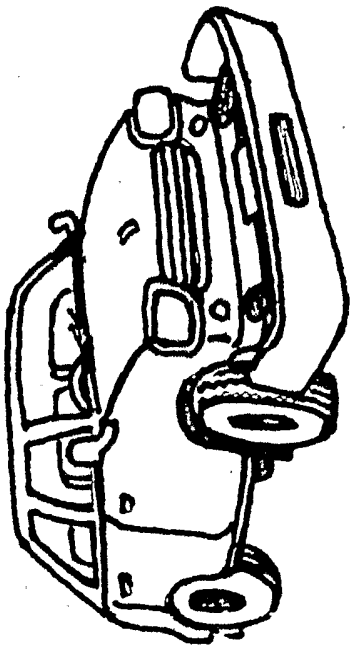

Fig. 3A

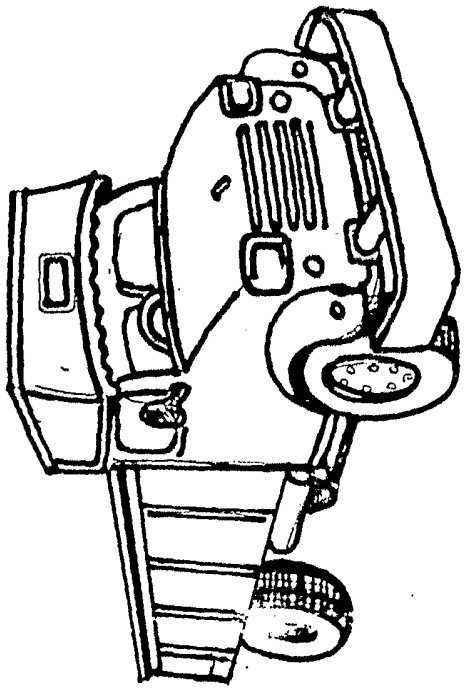

Fig. 3B

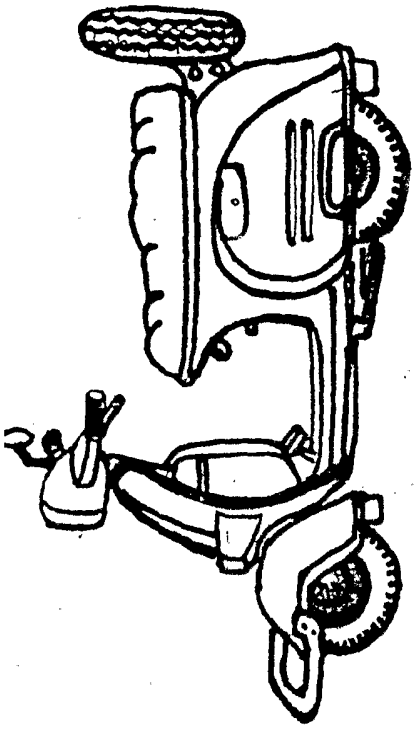

Fig. 3C

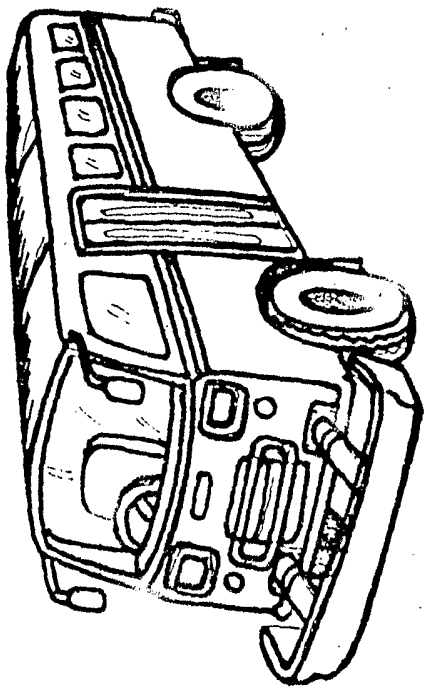

Fig. 3D

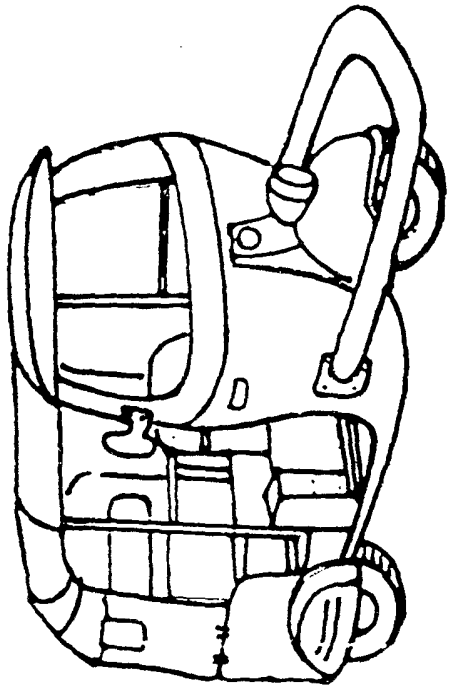

Fig. 4A

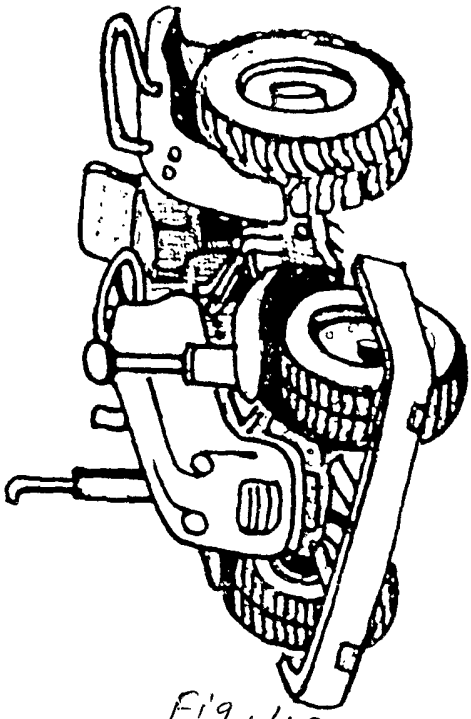

Fig. 4B

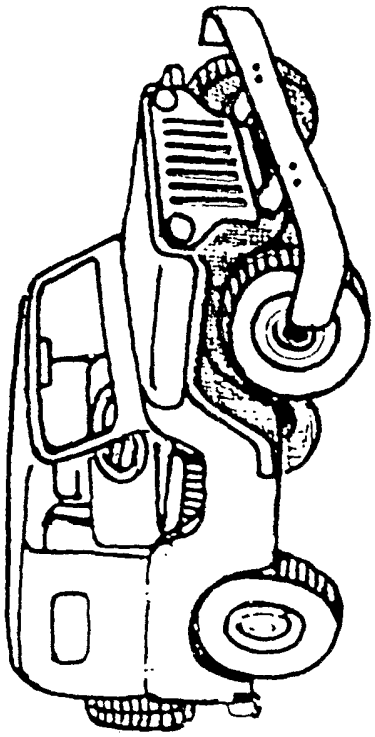

Fig. 4C

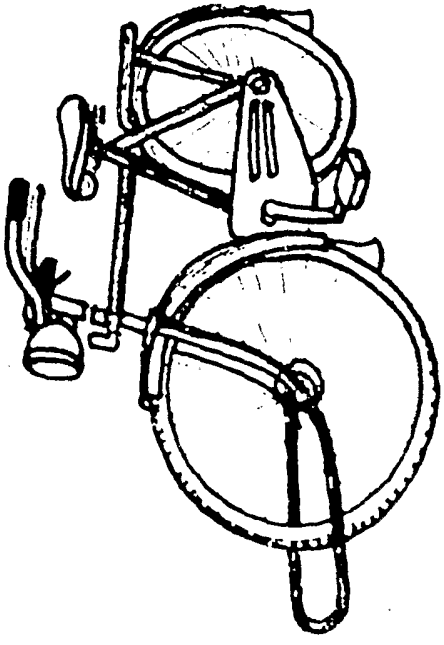

Fig. 4D

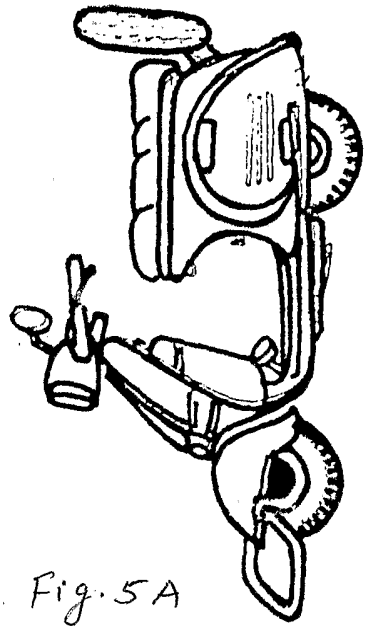

Fig. 5A

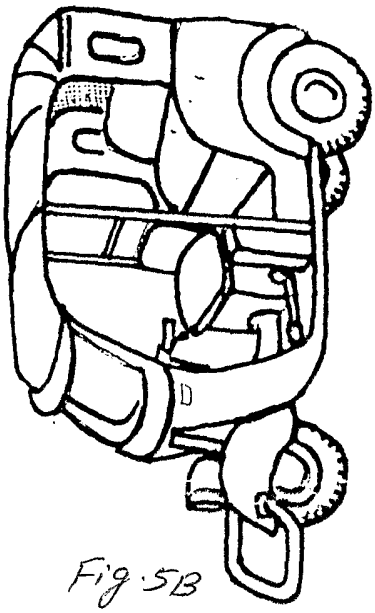

Fig. 5B

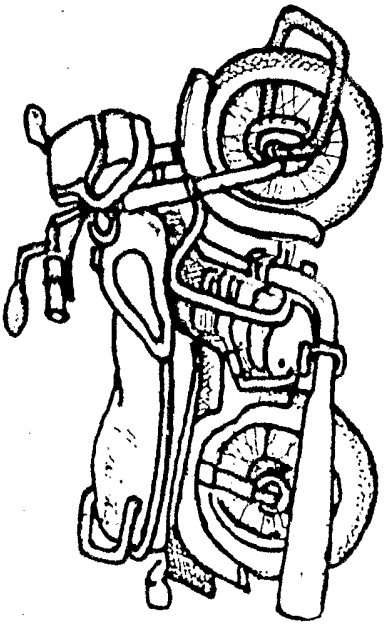

Fig. 5C

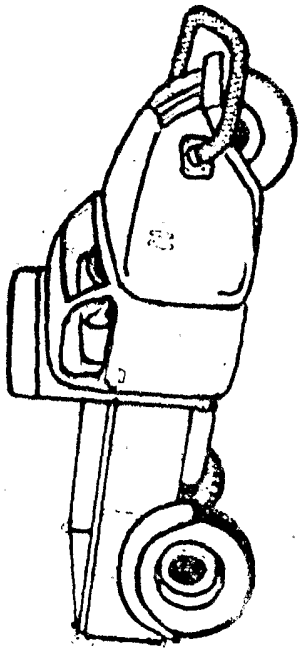

Fig. 5D

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB 02/05728

CLASSIFICATION OF SUBJECT MATTER

IPC[7]: B60T 7/22, B 60T 7/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC[7]: B60T

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, EPODOC, WPI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0369077 A1 (XIAOSHENG) 23 May 1990 (23.05.90) *fig. 1, 2; claim 1.*	1
X	EP 0511427 A1 (MISHI) 4 November 1992 (04.11.92) *fig. 1, 2; claim 7.*	1

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

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„P" document published prior to the international filing date but later than the priority date claimed

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„&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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Name and mailing adress of the ISA/AT Austrian Patent Office Dresdner Straße 87, A-1200 Vienna Facsimile No. 1/53424/535	Authorized officer RIEDER W. Telephone No. 1/53424/366

Form PCT/ISA/210 (second sheet) (July 1998)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/IB 02/05728

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP A 369077		EP A 0369077	1990-05-23
EP A 511427		EP A 0511427	1992-11-04