

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN COLLIS
and VOLKER-OLIVER HUPPERICH

Appeal No. 2005-1125
Application No. 10/144,328

ON BRIEF

Before FRANKFORT, MCQUADE, and BAHR, Administrative Patent Judges.
MCQUADE, Administrative Patent Judge.

DECISION ON APPEAL

John Collis et al. appeal from the final rejection of claims 1 through 13, all of the claims pending in the application.¹

THE INVENTION

The invention relates to a piston-cylinder assembly for use in a variety of applications including as a vibration absorber, pneumatic spring or hydraulic actuator. Representative claim 1 reads as follows:

1. A piston-cylinder assembly comprising:
a container tube,
a piston rod guided axially in said container tube,

¹Claim 1 has been amended subsequent to final rejection.

a resilient stop pad fitted concentrically to the piston rod,
an end cap fitted to the container tube, said end cap being pressed onto the container tube by the resilient stop pad when the piston rod is moved into the container tube, and
a sheath tube fitted to said stop pad and to said end cap, said sheath tube having at least one elastic fold and covering said piston rod between said stop pad and said end cap, said sheath tube, said resilient stop pad, and said end cap being formed as separate parts and assembled to form a preassembled unit which can stand independently of said piston rod and said container tube.

THE PRIOR ART

The references relied on by the examiner to support the final rejection are:

Fotino et al. (Fotino)	5,901,947	May 11, 1999
McCormick et al. (McCormick)	6,199,844	Mar. 13, 2001
Handke et al, German Patent Document (Handke)	196 41 728	Apr. 16, 1998
Fichtel & Sachs Co., German Patent Document (Fichtel)	91 09 020.2	Nov. 28, 1991

THE REJECTIONS

Claims 1, 6 through 8 and 11 through 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over McCormick in view of Fotino.

Claims 2 through 5 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over McCormick in view of Fotino and Fichtel.

Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over McCormick in view of Fotino, Fichtel and Handke.

Attention is directed to the main and reply briefs (Paper Nos. 14 and 17) and the final rejection and answer (Paper Nos. 9 and 16) for the respective positions of the appellants and the examiner regarding the merits of these rejections.²

DISCUSSION

McCormick, the examiner's primary reference, discloses a vehicle suspension system 10 comprising a piston-cylinder arrangement disposed between a tire 12 and a shock tower 20. The system includes a strut cylinder 30, a piston rod 58, a jounce bumper 26, a striker cap 32 and a bellows 56, with these elements being operatively associated as shown in Figures 1 and 2.

²The record indicates that English language translations of the German references, prepared on behalf of the United States Patent and Trademark Office, were mailed to the appellants with the examiner's answer.

The appellants contend that McCormick does not disclose, and would not have suggested, a piston-cylinder assembly meeting the limitation in independent claim 1 requiring the sheath tube (McCormick's bellows 56), the resilient stop pad (McCormick's jounce bumper 26) and the end cap (McCormick's striker cap 32) to be "formed as separate parts and assembled to form a preassembled unit which can stand independently of said piston rod and said container tube." The examiner takes two approaches to this issue.

In the first approach, the examiner submits that "[c]learly the elements [i.e., the bellows 56, jounce bumper 26 and striker cap 32] of McCormick et al [are] capable of being assembled apart from the rest of the damper" (answer, page 3). McCormick, however, does not provide any factual support for this assertion. Although the reference discloses that the bellows 56, jounce bumper 26 and striker cap 32 are formed as separate parts, it does not disclose, and would not have suggested, that these elements are, or are capable of being, "assembled to form a preassembled unit which can stand independently of said piston rod and said container tube" under any reasonable interpretation of this claim language.

In the second approach, the examiner implicitly concedes that McCormick does not respond to the claim limitations in question and turns to Fotino to overcome this deficiency (see page 3 in the final rejection).

Fotino discloses a piston-cylinder assembly similar in many respects to that disclosed by McCormick. One of the differences between the two resides in Fotino's jounce bumper and bellows being formed as a one piece, integrally molded subassembly. In one embodiment, the subassembly also includes a collar at the opposite end of the bellows from the jounce bumper for securement to the cylinder.

In proposing to combine McCormick and Fotino to reject claim 1, the examiner concludes that it would have been obvious "to have modified the sheath tube, resilient stop pad, and end cap components of McCormick et al. to have been preassembled, as taught by Fotino et al., in order to provide a subassembly that facilitates manufacturing of the suspension spring system" (final rejection, page 3). This conclusion is unsound because Fotino does not actually teach or suggest preassembly of the bellows and bumper disclosed therein. Fotino's disclosure of the manufacture of these elements as a one piece, integrally formed subassembly

contains no suggestion for assembling McCormick's separately formed sheath tube, resilient stop pad and end cap to form a preassembled unit which can stand independently of the piston rod and container tube as recited in claim 1.

Thus, the combined teachings of McCormick and Fotino do not justify a conclusion that the differences between the subject matter recited in independent claim 1 and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art. Accordingly, we shall not sustain the standing 35 U.S.C. § 103(a) rejection of claim 1, and dependent claims 6 through 8 and 11 through 13, as being unpatentable over McCormick in view of Fotino.

As the examiner's application of Fichtel and Handke does not cure the foregoing shortcomings of McCormick and Fotino relative to parent claim 1, we also shall not sustain the standing 35 U.S.C. § 103 rejection of dependent claims 2 through 5 and 10 as being unpatentable over McCormick in view of Fotino and Fichtel, or the standing 35 U.S.C. § 103 rejection of dependent claim 9 as

being unpatentable over McCormick in view of Fotino, Fichtel and Handke.³

SUMMARY

The decision of the examiner to reject claims 1 through 13 is reversed.

³Although the examiner employs Handke in a relatively minor capacity to reject dependent claim 9, this reference arguably is more pertinent to the subject matter recited in the appealed claims than is the primary reference to McCormick. Upon return of the application to the technology center, the examiner may wish to reassess the patentability of the appellants' invention in light of the apparent illustration in Handke's Figures 6 through 8 of piston-cylinder arrangements having a sheath tube, resilient stop pad and end cap formed as separate parts and connected in such a way as to be inherently capable of being assembled to form a preassembled unit which can stand independently of the associated piston rod and container tube.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REVERSED

CHARLES E. FRANKFORT)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOHN P. MCQUADE)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
JENNIFER D. BAHR)	
Administrative Patent Judge)	

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