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NEW BORON AND SULFUR CONTAINING HETEROCYCLIC COMPOUNDS FROM TRIETHYLALKYNYL BORATE AND SULFONYL CHLORIDES

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Trialkylalkynylborates are coordinatively saturated anionic species that through an intramolecular transfer mechanism behave like vinyl carbanions in reaction with electrophiles.

This communication deals with the reaction of the triethylalkynylborate $\underline{1}$ with sulfonyl- and sulfinylchlorides. Under carefully controlled conditions the products $\underline{2}$ (n=1,2) were isolated.

This result is in contrast with the report of Utimoto et al [Tetrahedron Lett. 1847 (1973)] who only observed the formation of disubstituted acetylenes.

The compounds 2 are unexpectedly stable.

The structure as well as some chemical properties of $\underline{2}$ will be discussed in detail. Evidence will be presented for a strong coordination of the sulfone (sulfoxide) oxygen atom with the boron atom.