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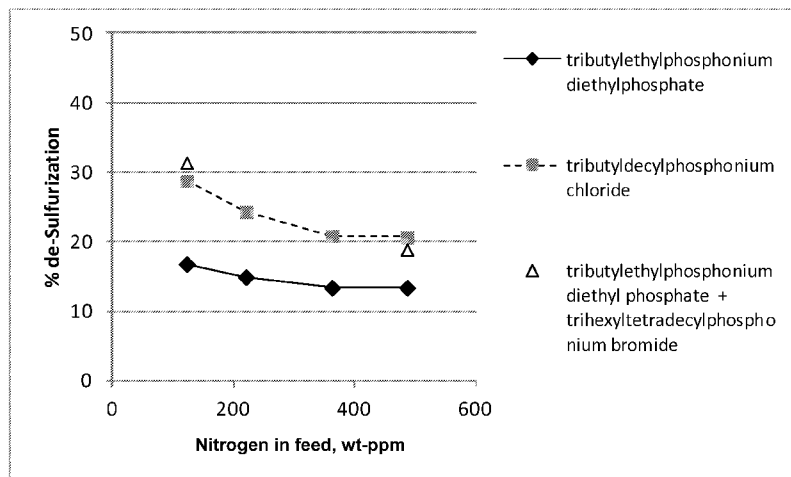
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(54) Title: PROCESS FOR REMOVING SULFUR COMPOUNDS FROM VACUUM GAS OIL



(57) Abstract: A process for removing a sulfur compound from a low nitrogen content vacuum gas oil feed includes contacting the low nitrogen content vacuum gas oil feed comprising the sulfur compound with a VGO-immiscible phosphonium ionic liquid to produce a vacuum gas oil and VGO-immiscible phosphonium ionic liquid mixture, and separating the mixture to produce a vacuum gas oil effluent having a reduced sulfur compound content relative to the vacuum gas oil feed. It was found that the amount of the sulfur compound being removed was significantly improved by treating a low nitrogen content vacuum gas oil. The low nitrogen content and especially a low level of polar nitrogen compounds increases the amount of sulfur compounds that can be removed.