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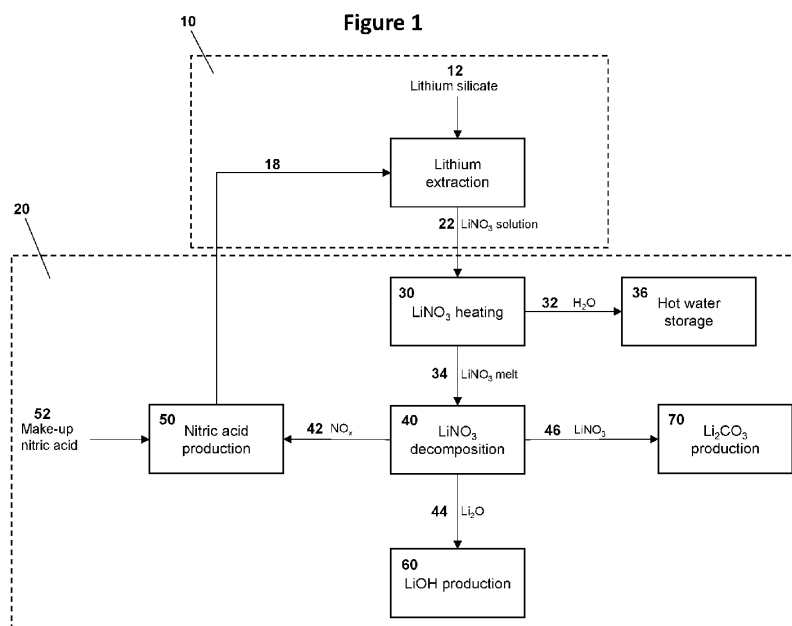
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## (54) Title: PROCESS AND SYSTEM FOR LITHIUM PRODUCTION



(57) **Abstract:** A process and system are disclosed for producing a lithium product from a solution comprising lithium nitrate. The solution comprising lithium nitrate can be obtained by reacting a lithium-containing metal silicate with nitric acid. The process and system comprise subjecting the solution comprising lithium nitrate to a first thermal treatment procedure (in one or more heated vessels) in which water and nitric acid (when present) are removed, and whereby a resultant lithium nitrate-rich crystal slurry is heated to produce a molten liquid. The process and system also comprise passing the molten liquid to a second thermal treatment procedure (in a further-heated vessel) in which the molten liquid is heated to substantially decompose lithium nitrate to lithium oxide.

[Continued on next page]

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