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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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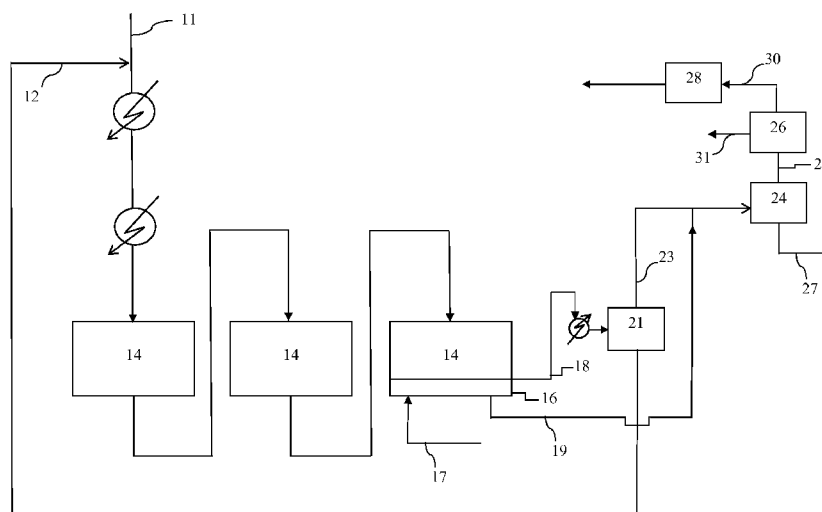
(54) **Title:** PROCESS OF PRODUCING CYCLOHEXYLBENZENE

Figure 1

(57) **Abstract:** In a process for producing cyclohexylbenzene, benzene is contacted with hydrogen in the presence of a hydroalkylation catalyst under hydroalkylation conditions effective to form a first effluent stream comprising cyclohexylbenzene, cyclohexane, and benzene. At least a portion of the cyclohexane from the first effluent stream is then contacted with hydrogen in the presence of a dehydrogenation catalyst under dehydrogenation conditions effective to convert at least some of the cyclohexane into benzene contained in a second effluent stream. At least some of the hydrogen is supplied to the process so as to contact the dehydrogenation zone (e.g., the dehydrogenation catalyst) before contacting the hydroalkylation catalyst.



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