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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))
- of inventorship (Rule 4.17(iv))

[Continued on next page]

- (54) **Title:** FORMATION OF [2,2] PARACYCLOPHANE AND RELATED COMPOUNDS AND METHODS FOR THE FORMATION OF POLYMERS FROM CYCLOPHANES

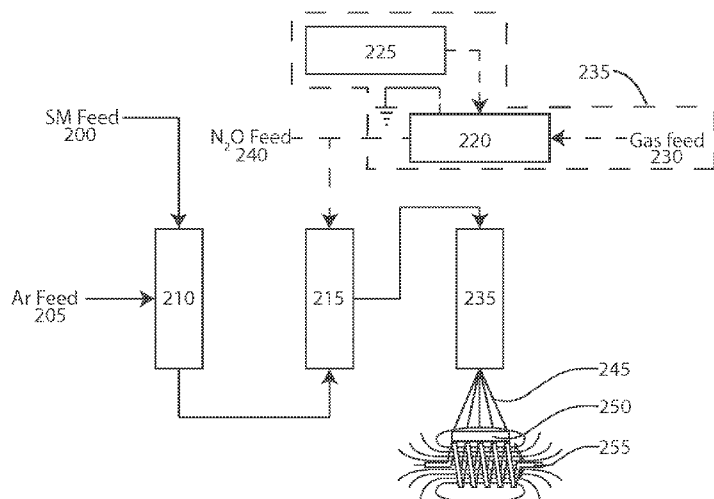


FIGURE 3

(57) **Abstract:** The present invention is an improved process and method for the formation of stable intermediate cyclophanes. The invention provides for a general method for the production of substituted and unsubstituted cyclophanes. The components of the invention are a pyrolysis reaction tube that may be electrically heated into which a flowing stream of nitrous oxide with xylene vapor in an optional inert carrier gas at atmospheric pressure. The exit gas is condensed resulting in the deposition of [2,2']paracyclophane. Additionally a process and method whereby the reactive intermediates of the reaction described above can be directly deposited and polymerized at atmospheric pressures or thereabout is disclosed.



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