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(71) Applicant *(for all designated States except US)*: **NUGEN TGECHNOLOGIES, INC.** [US/US]; 11 Bennett Road, Redwood City, CA 94062 (US).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **KURN, Nurith** [IL/US]; 2876 Ramona Street, Palo Alto, CA 94306 (US).

(74) Agents: **POLIZZI, Catherine, M.** et al.; Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA 94304-1018 (US).

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(54) Title: METHODS AND COMPOSITIONS FOR TRANSCRIPTION-BASED NUCLEIC ACID AMPLIFICATION

(57) Abstract: Methods for isothermal exponential amplification of a target polynucleotide are disclosed. The methods employ two transcription modules, the first module providing linear amplification resulting in RNA transcripts, and a second module providing for further (generally cyclical) amplification resulting in more RNA transcripts. In one aspect, the amplification for the first module is composite primer based. In a second aspect, the amplification of the first module is based on target switching to generate a primer extension product comprising a promoter sequence. In all aspects, the RNA transcripts of the first transcription module are subjected to further amplification by creating an intermediate product comprising a double stranded promoter region from which transcription can occur. The invention further provides compositions and kits for practicing said methods, as well as methods which use the amplification results.