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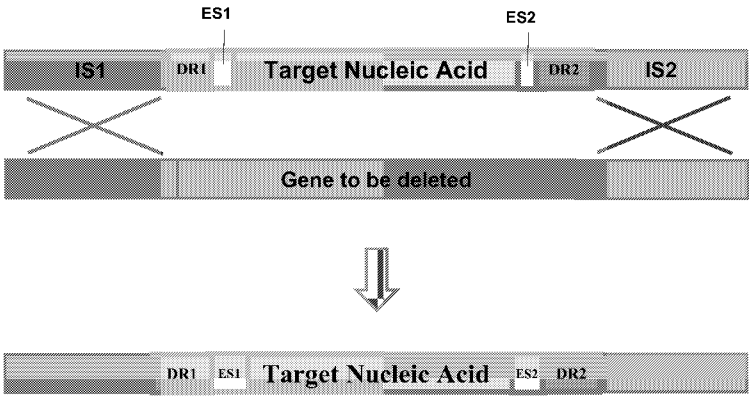


FIGURE 2

(57) Abstract: Nucleic acids, compositions, and methods that allow for the excision of one or more loci from the genome of a host cell are provided herein. In particular, provided herein is an excisable nucleic acid construct comprising, in a 5' to 3' orientation: a first tandem repeat nucleic acid, a first homing endonuclease recognition site, a target nucleic acid, a second homing endonuclease recognition site, and a second tandem repeat nucleic acid. In some embodiments, the excisable nucleic acid construct is integrated into the host cell genome, and the target nucleic acid can be excised from the host cell genome by contacting the homing endonuclease recognition sites with one or more appropriate homing endonucleases.

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