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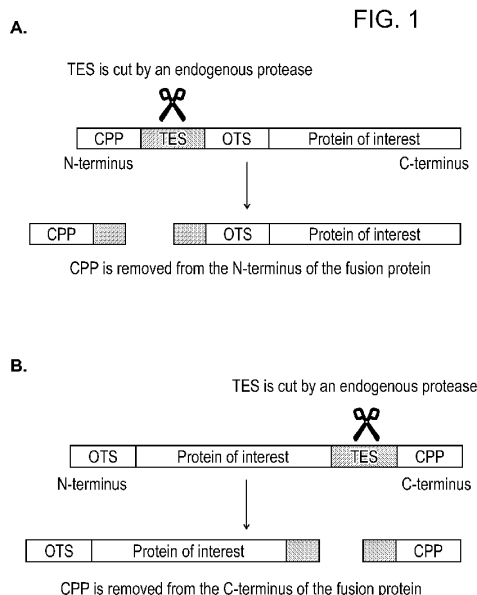
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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

(54) Title: MOLECULES FOR ORGANELLE-SPECIFIC PROTEIN DELIVERY



(57) Abstract: The present disclosure provides a fusion protein useful for treating a non-nuclear organelle associated disorder, such as a genetic disorder, *e.g.*, Friedrich's Ataxia. The fusion protein may comprise a protein of interest to be delivered to a non-nuclear organelle; an organelle targeting sequence (OTS); a cell penetrating peptide (CPP); and a target enhancing sequence (TES); wherein the CPP is capable of interference with delivery of the protein of interest to the non-nuclear organelle; and wherein the TES prevents said interference by the CPP. The fusion protein may also comprise a protein of interest to be delivered to a non-nuclear organelle; a CPP and a TES. The present disclosure also provides methods for treating a non-nuclear organelle associated disorder by administering the fusion protein to a subject in need thereof.

[Continued on next page]

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