

Title (en)

SYSTEMS FOR PARTICLE RADIATION ENHANCED DELIVERY OF THERAPY

Title (de)

SYSTEME ZUR DURCH PARTIKELSTRAHLUNG VERSTÄRKTN VERABREICHUNG EINER THERAPIE

Title (fr)

SYSTÈMES D'ACCENTUATION DE L'ADMINISTRATION D'UNE THÉRAPIE PAR RAYONNEMENT DE PARTICULES

Publication

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Application

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Priority

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- US 95277307 P 20070730

Abstract (en)

[origin: WO2009018383A1] Systems and methods for enhancing the selective targeting of agents (204) for preferential action at a target with reduced action with healthy tissue distal the target tissue. One or more agents (204) can be combined with nano scale structures/particles (202) for delivery to the target tissue. Appropriate bombardment with accelerated particle radiation, such as proton radiation, induces the release of the agents (204) at the target site. Nano carriers can be combined with therapeutic and/or imaging enhancement agents (204). Imaging of the target tissue can provide a verification of the delivered dose of particle radiation. Nanocarriers can be provided with an outer shell selected for biocompatibility and durability in the in vivo environment and further selected to provide a feedback mechanism in the treatment environment to accelerate the release of the agent (204) and reduce a total radiation dose needed for that release.

IPC 8 full level

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CPC (source: EP)

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