LANTHANUM - La

Example of application

CARBON-ARC LIGHTS

Carbon-arc lights are used in the film industry for studio lighting and projector lights.
Rare earths' compounds containing lanthanum increase the brightness and give an emission spectrum similar to sunlight.

CERIUM - Ce

Example of application

SOLAR PANELS

Cerium, in combination with tin oxide, is used for UV absorption in solar panels.

PRASEODYMIUM - Pr

Example of application

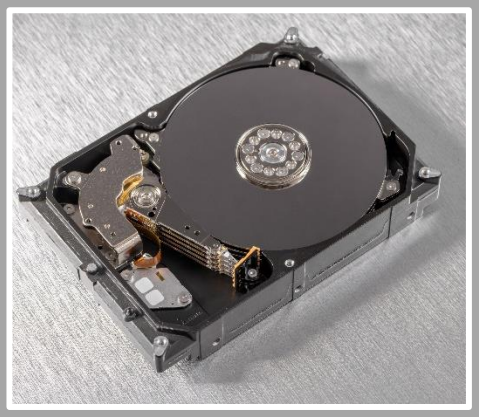
DIGITAL WATCHES

NEODYMIUM – Nd

Example of application

COMPUTER HARD DRIVES

Neodymium is utilized in NdFeB (neodymium-iron-boron) magnets which are permanent magnets used in notebooks. These magnets are present in voice coil accelerator in hard disk drives; in spindle motor for the hard disk drives; in spindle motor for optical drives; in loudspeakers.



SAMARIUM - Sm

Example of application

HEADPHONES

Samarium is used in permanent magnets that are much more powerful than iron magnets, because they remain magnetic at high temperatures. These powerful magnets are used in microwave applications, enabling the miniaturization of electronic devices like headphones.

EUROPIUM – Eu

Example of application

FLUORESCENT LAMPS

GADOLINIUM - Gd

Example of application

LCD TVs

Gadolinium is used in phosphors for colour TV tubes and LCD TVs/monitors.