Efforts to build a better mouse roll along

The Associated Press

NEW YORK — The world has been trying to build a better mousetrap for quite some time, but in the personal computer business they go at things from a different angle.

Companies are scrambling to perfect a new kind of mouse — one that works on portable PCs just as well as bulkier desktop models.

Mice are the palm-sized devices that allow computer users to "point and click" on a screen to give the computer commands.

Users of the increasingly popular laptops don't have the luxury of a flat surface like a desk on which to move the mouse around, so companies have come up with a host of alternatives.

Some are "trackballs," a stationary rolling ball mounted under the screen or attached to the side of the keyboard. Others are mini-mice that pop out from the side, or joysticks that take the form of tiny red pegs stuck in between the G, H and B keys. Other models use the J key to double as a joystick.

Experiments with different mouse styles are some of the boldest in the PC business. Makers tout the virtues of each with reams of statistics that are meant to impress.

But people who watch the companies closely say

Please see MICE/12B

R&D hot and heavy into mice alternatives

MICE
From 7B

customers haven't decided which is best.

"I find that it's very personal," said Jim Louderback, director of PC Week Labs, which tests products for the industry newspaper. "You ask any 10 people what their favorite thing is among you'll get 10 different answers."

"Each approach carries a certain amount of baggage with it," said Bryce G. Rutte, of the Metaphase Design Group, a St. Louis firm that has done research for several high-tech companies.

He favors the detachable trackball that is the most widely used mouse alternative because it gives people a break from pounding of keys, even if it's to make a small reach for just a few seconds.

"On the other hand, proponents of mice alternatives built into the keyboard — such as the Trackpoint II peg on IBM's Thinkpad computers — say people can be more productive because they don't have to move their hands as much.

"It depends on what you're going to be using your computer for," said Erik Nilsen, an assistant professor of psychology at Lewis and Clark College in Portland, Ore. His research found people use the IBM Trackpoint II and J-Mouse, developed by Home Row Software Inc. and appearing in laptops by Zenith Data Systems and Packard Bell Electronics Inc., faster than trackballs with most programs.

One of Nilsen's studies was partially financed by Home Row.

IBM scientists spent six years developing Trackpoint II.

The company tried dozens of prototypes, including 50 variations of the material that covers the peg, said Ted Selker, the scientist who led its development.

"That rubber on the top is months of work," Selker said.

A similar effort at Hewlett-Packard Co. led to a small mouse that pops out of the side of the company's Omnibook 300. The design was new to laptops and won praise because it worked just like a mouse did on the desk. But, unlike tethered mice that can be on either side of the keyboard, the HP minimouse is on the right side, limiting its usefulness for left-handers.

Analysts believe it may take years, if ever, for one alternative to emerge as the dominant product.

PC Week's Louderback said, "It's really funny, there are still people you see on airplanes running a mouse up and down their leg."