



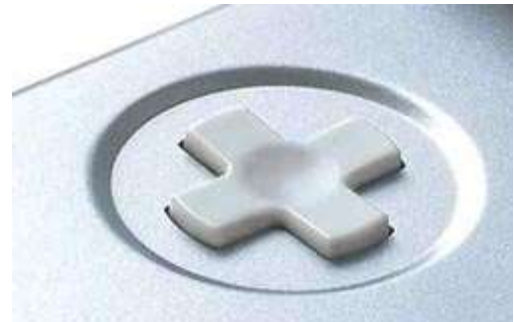
## A Brief History of Handheld Video Games



by Donald Melanson | @donmelanson | March 3rd 2006 At 3:07pm

0

We're not normally ones for making assumptions, but we'll go out on a limb and say that most of you reading this have one or more portable gaming systems lying around somewhere. Handheld video gaming has always been a few steps behind its console counterpart, but that's proven to be a small trade-off for the benefits of portability and, to some, even part of the appeal.



So, while most gamers are now enjoying their PSPs and Micros and DSs, we thought we'd take a little trip back and look at some of the handhelds from whence they came before them. Although we have to warn you, reading this feature may cause an uncontrollable urge to jump over to eBay.

### The Early Years

#### Mattel's LED-based Handhelds - 1977-78

The idea of handheld video games with interchangeable cartridges wouldn't take hold for about another decade, but



APLIX EXHIBIT 2038  
SCEA v. APLIX  
IPR2015-00533

Mattel managed to pry video games away from quarter-swallowing arcades and dim televisions with their successful line of LED-based, single-game handhelds. Most people today will remember Football, but the company also released the creatively-titled Baseball and Basketball, as well as the non-sports titles Missile Attack, Armor Battle, and Sub Chase. Mattel also managed to jump on the retro-chic bandwagon, re-releasing Football and Baseball in 2000.



Click on to see the rest!

### **Milton Bradley Microvision - 1979**

Milton Bradley, a company then better known for Hungry Hungry Hippos than video games, has the distinction of being the first to introduce a handheld video game console with interchangeable cartridges with its Microvision. The system had only a handful of games and was plagued with problems from the start, including a 16x16 pixel LCD screen that was prone to rotting and cartridges that could be permanently damaged by even a relatively small static charge. Sounds like the makings of a real collector's item, if you ask us.



### **Nintendo's Game & Watch Series - 1980-91**

Upping the ante from Mattel's LED handhelds, Nintendo introduced their first Game & Watch handheld in 1980 and would go on to produce dozens more throughout the decade, offering a small glimpse of what was to come from the company. As the name suggests, the handhelds featured a clock and alarm but the real attraction was the games, which included titles like Donkey Kong, Mario Bros, and Balloon Fight. Gee, this thing looks kind of familiar (but we just can't place it).



### **Epoch Game Pocket Computer - 1984**

It took five years after Milton Bradley's Microvision before another company would try its hand at a portable gaming system, but unfortunately the second time around proved even less successful than the first. Epoch's Game Pocket Computer was released



only in Japan in 1984 and had just five games. The 75x64 LCD screen was a big step up from the Microvision but, as you can tell from the number of people who have actually ever heard of the device, it never caught on.

## The New Wave

### Nintendo Game Boy - 1989

It's almost impossible to understate the impact of Nintendo's Game Boy. The original Game Boy, in its various incarnations, is the most successful video game system ever -- handheld or otherwise. Part of its success is likely due to its reasonable price (\$109 US at launch), but most of it is a result of the games and, in particular, the drop dead brilliant move of bundling Tetris with the system.



The fact that a system with a blurry, green screen and fairly lackluster graphics compared to its competitors was as successful as it was should forever serve strongly in support of the argument that it's the games that make the system, not the hardware.

Nintendo would make some improvements to the design over the years, releasing the slimmer Game Boy Pocket in 1996, which replaced the original's green screen with a regular grayscale display, and the Game Boy Light, which added a backlit screen but was unfortunately only available in Japan.

### Atari Lynx / Lynx II - 1989

The first of many challengers to the Game Boy was Atari's Lynx, co-developed with Epyx and released in 1989. The system had far better graphics than the Game Boy, in some cases rivalling the console systems of the time, but it was big and much more expensive than Nintendo's affordable unit. Atari redesigned the unit in 1991 but Atari's marketing efforts proved to be no match for Nintendo's, who were already well on their way to dominating the field for years to come.



### NEC Turbo Express - 1990

NEC managed to produce one of the most technically impressive handhelds with its Turbo Express, which was actually a portable version of its console system, the Turbographx 16 (a rival to the Sega Genesis and Super Nintendo). The Turbo Express was about the size of a Game Boy but had a sharp active-matrix color display and could even be used as a portable TV with an optional tuner. The downside was, of course, the price which, at \$299.99US, seemed to aim the device at a niche market that didn't yet exist -- the (portable) gaming enthusiast.



### Sega Game Gear - 1990

The most successful of the various Game Boy challengers was Sega's Game Gear which, like the Lynx and Turbo Express, had a color screen. But unlike those systems managed to keep the retail price down to a fairly reasonable \$149. The Game Gear benefited from Sega's advantage over Atari and NEC (the Genesis was then the leading console system) and a better selection of games, but it was still only a modest success in the face of Nintendo's increasing dominance of the market.



### Sega Nomad - 1995

For most of the 1990s, Nintendo had the handheld market effectively all to themselves, with other companies giving up after trying and failing to knock Nintendo down a few pegs. Sega was the first to re-enter the field with the Sega Nomad, a portable version of the Genesis console. It seemed like a good idea -- after all the Genesis had a huge library of titles just sitting around countless livingrooms -- but poor battery life and a somewhat bulky design helped to do it in. Even an eventual price drop to \$79.99 failed to save the Nomad from being put out to pasture.





### **Tiger Electronics game.com - 1997**

You can't fault Tiger Electronics for their ambition. Their game.com handheld, as the name suggests, attempted to bring Internet access and PDA functions to a gaming handheld. Unfortunately, it didn't do any one thing particularly well: its disappointing games were made even worse by the unit's outdated screen, and its "Internet access" only let you check email and browse the web in text -- nope, no online gameplay here. Still, as with many of these systems, communities of die-hard gamers have found refuge on the web with other like-minded individuals, devoted to breathing some new life into their late, lamented handhelds.



### **Neo-Geo Pocket / Pocket Color - 1998-99**

Mention the name Neo-Geo to any gamer over the age of 25 or so and you'll likely get a knowing smile. A lucky few may have owned the pricey home system that made the Super Nintendo and Sega Genesis look like yesterdays news, but most will be familiar with Neo-Geo from their arcade games -- especially fighting games like the Samurai Showdown and King of Fighters series. Attempting to build on their reputation, Neo-Geo branched out into the handheld space in 1998 with the Neo-Geo Pocket, but got off to a rocky start, releasing a black-and-white unit first before correcting things just a year later with the Neo-Geo Pocket Color (or NGPC). Despite some solid games, the system never got much support from third-party developers and failed to attract enough gamers to legitimately challenge the still dominant Nintendo. This is the one we probably miss most 'round Engadget HQ, truth be told.



### **Game Boy Color - 1998**

Nintendo introduced its first major revision to the Game Boy in 1998 with the Game Boy Color, which, not surprisingly, offered a color screen, case, and better graphics capabilities while still being backward compatible



# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.