This heading was prepared with the \thispageheading command.
It allows long multi-line headings!

The watermark package*

Alexander I. Rozhenko
rozhenko@oapmg.sscc.ru

2004/12/09

1   User Interface

\watermark
\leftwatermark
\rightwatermark
\thiswatermark

The package provides watermarks on output pages. A watermark is some text or picture printed at the background of paper. A watermark is prepared in a picture box stored at the beginning of header. So, you should place the watermark material with LaTeX's \put and \multiput commands. Allowed watermark commands are shown in the table:

Command	Meaning
\watermark{⟨body⟩}	Set the same watermark for all pages
\leftwatermark{⟨body⟩}	Set the even-page watermark
\rightwatermark{⟨body⟩}	Set the odd-page watermark
\thiswatermark{⟨body⟩}	Set a watermark for the current page only

In one-side mode, the \leftwatermark is ignored and the \rightwatermark is applied to all pages.

\thispageheading   The package also provides the command \thispageheading{⟨heading⟩} which replaces a heading for the current page to the specified multi-line heading. The heading is prepared in the parbox of the \textwidth width aligned on the top line. This command does not suppress watermarks.

Examples of using watermarks are shown in the ncccropmark package.

2   The Implementation

\@begindvi   To support watermarks, we use the \@begindvi hook from the output routine. This hook works only once at the beginning of dvi, but some packages (e.g. hyperref) also use it for their own needs. So, we redefine it at the beginning of document in such a way to accurately save its behaviour after the first call when it can be redefined by other packages. All the we need from this hook — to

---

*This file has version number v1.1, last revised 2004/12/09.

call the `\WMK@insert` command every time when the output routine composes a new page.

```
1 ⟨∗package⟩
2 \AtBeginDocument{
3   \let\WMK@begindvi\@begindvi
4   \def\@begindvi{%
```

Apply saved `\@begindvi` hook and then call the `\WMK@insert` command:

```
5     \WMK@begindvi
6     \WMK@insert
```

After that we must redefine the `\@begindvi` hook, because it is already redefined here to the `\@empty` value (or to something else if another package using this hook is loaded). We save its new meaning in the `\WMK@begindvi` command and redefine the `\@begindvi`:

```
7     \global\let\WMK@begindvi\@begindvi
8     \gdef\@begindvi{\WMK@begindvi\WMK@insert}%
9   }%
10 }
```

\WMK@insert The command redefines the current header and inserts the `\WMK@hook` at the beginning of header. A box produced by this hook has zero natural sizes.

```
11 \def\WMK@insert{%
12   \let\WMK@head\@thehead
13   \def\@thehead{\WMK@hook\WMK@head}%
14 }
```

\WMK@hook The command applies this watermark (`\WMK@this`), odd watermark (`\WMK@odd`), or even watermark (`\WMK@even`). The watermarks are prepared within the picture environment:

```
15 \def\WMK@hook{%
16   \begin{picture}(0,0)\relax
17     \ifx\WMK@this\relax
18       \if@twoside
19         \ifodd\c@page\WMK@odd\else\WMK@even\fi
20       \else
21         \WMK@odd
22       \fi
23     \else
24       \WMK@this \global\let\WMK@this\relax
25     \fi
26   \end{picture}%
```

After that we test the header. At the first, we test the `\WMK@thishead` command. If it is specified, we let `\WMK@head` to `\WMK@thishead`.

```
27   \ifx\WMK@thishead\relax \else
28     \let\WMK@head\WMK@thishead
29     \global\let\WMK@thishead\relax
30   \fi
```

The original `\@thehead` command saved in `\WMK@head` can be defined with `\@oddhead` content or can be let to `\@oddhead` or `\@evenhead`. We test all these cases to recognize when the head is really empty. A head prepared with `\thispageheading` can be also empty. If the empty case is recognized, we insert the `\hfil` command to avoid underfull.

```
31   \ifx\WMK@head\@empty \hfil
32   \else
33     \def\@tempa{\@oddhead}%
34     \ifx\WMK@head\@tempa
35       \ifx\@oddhead\@empty \hfil \fi
36     \fi
37   \fi
38 }
```

Set defaults for this heading and watermarks.

```
39 \let\WMK@thishead\relax
40 \let\WMK@this\relax
41 \let\WMK@odd\@empty
42 \let\WMK@even\@empty
```

`\watermark`
`\leftwatermark`
`\rightwatermark`
`\thiswatermark`

Define watermark producing commands:

```
43 \newcommand{\watermark}[1]{\leftwatermark{#1}\rightwatermark{#1}}
44 \newcommand{\leftwatermark}[1]{\gdef\WMK@even{#1}}
45 \newcommand{\rightwatermark}[1]{\gdef\WMK@odd{#1}}
46 \newcommand{\thiswatermark}[1]{\gdef\WMK@this{#1}}
```

`\thispageheading`

Finally, define the `\thispageheading{`⟨*heading*⟩`}` command. We especially test the case of empty heading and set `\WMK@thishead` to the `\@empty` value in this case. This allows avoiding underfull in the `\WMK@hook`.

```
47 \newcommand{\thispageheading}[1]{%
48   \def\@tempa{#1}%
49   \ifx\@tempa\@empty
50     \global\let\WMK@thishead\@empty
51   \else
52     \gdef\WMK@thishead{\parbox[t]\textwidth{#1}}%
53   \fi
54 }
55 ⟨/package⟩
```

3