

3,7&7!*!C%*3%!*<*0)(D,8*3!-&),8*(.7!D,E!%,+&!2&&.!2-(9&.H!*!.78-*38!)*.&!C*8%!8%&!
5*&..!>(.+&.8*(.!(.=*0)(D,8*3!-&),8*(.7H!8%&!5*&..!>(.+&.8*(.!(.>(.71),-!
/&),8*(.7!,<!-&)&+,.8!:&.&-)!J77& D2)E!-&7()18*(.7#

M. Peiden,

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T# \$%&!2*)*8(44&38*+&)E!3,F(18!8%&!C(-9!(4!<*0)(D,8*3!3(.71),-! D*77*(.7!
*7!78-*38)E!)*.9&<!8(!8%&!&.+*-(.D&.8!,<!8%&!3(<*8*(.7!1.<&-!C%*3%!*<*0)(D,8*3!,<!
3(.71),-!,F&.87!D,E!2&!C(-9*.FH!0,-8*31),-)E!8%(7&&),8&<!8(!7,4&8E!,<!7&31-*8E#!

D&,71-&7!%,+&!,!<*-&38!*D0,38!(8%&D!(0&-!41.38*(.*F!(4!=*0)(D,8*3!K*77*(.7!*!
7(D&!3(1.8-*&7H!8,9*.F!*8(!,33(1.8H!,D(.F!(8%&-7H!8%&!4,38!8%,8!2,9*.F!7&-+*3&7!
,-&!.(8!0-(+*<&<H!01-71,.8!8(!8%&!*D0)&D&.8,8*(.!(4!8%&7&!1.*),8&-!),.<!3(&-3*+&!
7,.38*(.7H!C%*3%H!*.!7(D&!*.78,.3&7H!&+8&4&8!N8,8&7!4-(D!%(!.*F!8%&*!
4*.,.3*,)!3(DD*8D&.87!C*8%!*8&-.,8*(.,)!(-F,.*6,8*(.7!8(!C%*3%!8%&E!,-&!K&D2&-7#
!

V# \$(!3(.3)1<&H!8%&!:(10!(4!;-*&.<7!+(C7!8(!70,-&!.(!&44(-8!*!0-&7&-+*.FH!0-(D(8*.F!
,.<!&4&.<*.F!8%&!0-&+,&).3&!,.<!+,*<*8E!(4!8%&!>%, -8&-!(4!8%&!?.*8&<!@,8*(.7#!B&!
-&*8&-8&! (1-! 4*-D! ,.<! 0-*3*0)&<! 0(7*8*(.!(4! 7100(-8! ,.<! ,<%&-&.3&! 8(! *87! +&-E!
8&.&87H!C%*3%!.(8!(.)E!,-&!8%&!)&F,))E!2*.*F!.,.<!F-&&<!-1)&7!2E!))!D&D2&-7!(4!
8%&!*.8&-.,8*(.,)!3(DD1.*8E!8(!F(+&-!(1-!7E78&D!(4!*8&-.,8*(.,)!-&),8*(.7!218!,-&!